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MR. ABERNETHY'S

PHYSIOLOGICAL, PATHOLOGICAL, AND SURGICAL OBSERVATIONS;

DELIVERED IN THE

ANATOMICAL COURSE OF LECTURES,

At St. Bartholomew's Hospital.

On the Kidney.

Function.—Now, with respect to the function of the kidney, its function is to secrete the *urine*; and then the question is, what is the urine? Every body knows that it is a watery liquor. But what is contained in water? Why, divers things; there is a great deal of animal matter—a great deal of it; and urine goes speedily into a state of putrefaction, and the product is, *ammonia*, as you must know. There is a great deal of animal matter in it, but then it is a kind of animal matter that is exceedingly soluble in water: you may evaporate the water of urine—of healthy urine, to a very considerable degree, without precipitating the animal matter; again, you may add water to a very considerable degree to it, and you may have this animal matter diffused throughout the whole of it; it is very soluble, and therefore it has been believed to be a peculiar kind of animal matter which has been distinguished; or which was at first distinguished, by the term *urea*. It is supposed that nature has given the kidney the prerogative of combining and modifying all the old animal matter of the body—modifying it so as to convert it into something like matter; and it is this which gives the citron colour and peculiar odour to healthy urine.

I find that chemists of late apply the term *urea* to something they can crystallise from this matter; but the original use of the word was such as I have endeavoured to explain to you. Now this is exceedingly curious, how the *albumen*, and matter not soluble, is to be converted into that which is soluble; and it is very likely that nature has given the kidney this power of converting insoluble matter into one that is soluble.

But other difficulties present themselves to our notice: how is all the old earth and lime to get out of the circulation? How is that animal matter in the blood, which we take in, to get out of the blood? This is done in a curious manner too: nature has given to the kidney the power of making *phosphoric acid*; and the kidney has the power of forming much more phosphoric acid than is necessary to dissolve all the *lime* that is secreted for a considerable time. If you drop *oxalic* acid into urine, you will precipitate lime in abundance from it, provided it is healthy. Well, if you get over this, you won't wonder how *salts* get into the urine, how salts are to be found in the kidney: we are continually taking in *sea*-salts with our food; we are too, taking salts occasionally, of another kind, as you all know; and if people take *nitre*, they will find it almost immediately in their urine. These things are met with in the urine, but really it is very curious how things sometimes are suspended in urine, which are readily precipitable; I allude to the morbid states of urine, where a great deal of albumen, or as Dr. Brown would say—*chyle*, is suspended in the urine. I say these are things, which my chemical knowledge at least, does not enable me to comprehend.

I have always said in these Lectures, however, ever since I knew this fact, and I have observed the same fact in other cases, that many many years ago, I knew a female who voided urine of such a description, that if she had discharged it into a *blanc-mange* dish, and if she had allowed it to cool, and turned it up when solid, she might have served it up at the table. (Laughter.) I gave the woman a lecture about her *digestive organs*; that was all I could say; and in about a dozen years afterwards, I saw her, she was then a fattish woman, and she said she still then occasionally voided the same sort of urine, but that she had got considerably better by the means I had suggested to her. There has been a case here lately in the

Hospital of this kind; but I am not now to speak of these things, it is the healthy function, it is the physiology that I have now to dwell upon, and the kidney is the great emunctory of the healthy circulation. What is it that is thrown off from the blood? *Saline juice*. What, from the skin? *Carbon*, and *water*. But how is the other improper stuff, that gets into the system, to get out of the different parts? O, the kidney is the organ—the kidney is the organ by which this is effected, in the healthy state, in a very wonderful manner.

Now, I take this opportunity with regard to the secerning organs, to say what ought to be stated with regard to secretion, for you can observe the secretion going on in the kidney; and the first thing that is to be said is, that you perceive that the secretions are vicarious to one another: a man may be drinking diluent liquor in a warm room, for a very considerable length of time, and he may not want to make water during the whole of the evening; while he is there, and so engaged, his skin is perspiring, and so on, but he goes out of that room into the cold, and on his way home, he has to turn to the wall every five minutes. There is a view which I have always laboured to make people attend to, and which is this—why does the blood circulate? Is it not that secretion should take place? Why the very building up of the body is secretion! Well, then, by secretion there will be a continual depletion of the blood itself; and how are the secretions to be supplied? by absorption. There is a sort of correspondence in these things, by which, in all probability, the *quantity* of blood is not only maintained, but the *quality* also, for if the blood is deprived of water, the absorption of water from any other part where it may be obtained, will be more ample, and *vice versa*. I spoke of this in the preliminary lectures, and I need not now tire you by repeating it. I wish, however, that you would consider this point, how important a thing it is that there should be a true balance between the quantity of circulating fluids, and the powers that circulate those fluids. If *perspiration* were to be suppressed, why the blood would be redundant with water, but then in that case the kidney takes up the secretion. The kidney prepares phosphoric acid; and I suppose I need not try to convince any gentleman present that there is no phosphoric acid in the blood, if there was it would coagulate the blood; there is *soda* in it. What is there then to be said of this secretion? The albumen must be admitted to be there; it must be admitted there is phosphoric acid in the kidney; and what are we to say with respect to that? Why, that secretion is a new formation—that the phosphoric acid is a new production; and then the question is, how is this effected? This is the grand problem proposed a long time back, and perhaps not answered, you will say, at present—How, from one kind of blood, can such dissimilar substances be got? And the old anatomists were looking to the arrangement of the vessels, to the tortuous course of the arteries and their branches, to find this out; but I defy any man to conjecture what use can result from muscular formation save that of filtration: it would spread that which was in it, but it could never make a new compound. Now Haller himself seemed to conceive that the result of these things was very much the result of vital feeling, for he has quoted the case of a hysterical female secreting nothing but colourless urine, watery urine, but he has let this nervous fit be suspended, and the kidney has again performed its functions and proper urine been secreted, more loaded too with animal substance and salts on account of the temporary suspension during the hysterical fit, therefore vital action has a great deal to do with it. But it was John Hunter who proved that vital action was the cause of all this: it was proved with respect to what we know takes place with regard to poison; a specific incision is made, a specific application of poison is made, and a specific secretion takes place. But if you were to say, how are these things prepared? I think no man in his senses can deny, but that it is by electrical operation; that electricity is the great agent of nature for the purpose of composition and decomposition of all surrounding substances, and we cannot doubt that the same agent inheres in animal bodies. A man who doubts of this, certainly could never have rubbed a black little *kitten* in the dark, or pulled off a black silk stocking in the dark; there is no doubt of electricity being thus employed. But I say it would be absurd to doubt that this was the agent for producing composition and decomposition in animal bodies after what Sir Humphrey Davy has told us. I cannot express my opinion on this subject now, in any different way to what I am accustomed to do. If any man had told me, in the early period of my life, that I should live to see chemical action explained, I should have said, well, I shall certainly not die at a less age than that of *Methuselem*. (Laughter.) But it has been done, and by Sir Humphrey Davy; he showed that it depended on the matter it possessed. I was present at his lectures, when I saw performed what formed the ground of the papers that were given by him to the Royal Society, and which I had read, but the reading of them certainly did not produce that impression on my mind which the ocular demonstration of his performance did. I saw the thing done, and

therefore I had conviction brought home to my mind. When I saw him make some *potash* pass through sulphuric acid, and come out potash on the other side of the dish, I said, it's wonderful! it's wonderful indeed! why who would have thought it! Who could have thought that a person could have mixed potash with sulphuric acid, and that it should have remained the same! Why, it is counteracting nature by using her own agents. Who could have thought it! Put potash into sulphuric acid, and what is the result? Why, that the most violent actions take place till they combine together, and then they are very sociable. On seeing this, I could not but think, that if I had been lecturing to the class Sir Humpary Davy was then lecturing to, which was principally composed of *ladies*, I should have said, now ladies, this is as wonderful as if I were to place a barrel of gunpowder before you, and, presenting you with some hot embers, you were to throw them into the powder, and they were to come through it without igniting it. Then I do not doubt but it is electrical, but electrical under the influence of the nervous system, and all the functions of the body are governed by that system.

Morbid Action.—Well, there is a *morbid* state of the kidney, which I think throws light upon the subject of secretion, and that is *diabetes*, where something like *sugar* abounds in the urine; they say it is positively sugar; you cannot crystallise it. I know, a long time ago, when I was a boy, I could not do it, but I thought that that was because I was not then up to the *sugar-making* business (laughter); but I do know this, that I have scraped as much crystallised sugar from a glazed vessel with a *flaw* in it, put under a patient's bed, where the urine transuded through it, I have scraped as much off as I could have sold to any one, in the morning, for half a pound of *good* Lisbon sugar! (Laughter.) Positively I did. I wanted, as Dr. Rollo did, to see whether, if I gave those people sugar, it would increase the quantity of sugar to be found in their urine, and it did. Then, having given them sugar, and kept them on vegetable food, I wanted to give them animal food, and to keep them on that, merely to try whether that would have the same effect, but they would not do it; they said I was trying experiments, and they would not submit to it. *Egad*, I half ruined myself in buying them oranges, and all the nice, sweet things I could get hold of, but as soon as I had done that they turned their backs to me. But Dr. Rollo met with a patient, a gentleman he was, and he found this, that there was no sugar in his urine when he did not live upon food containing sugar; and one day, after the Doctor had been directing this sort of diet, finding a little sugar in his urine, he said, "Sir, you have been taking some vegetables, or something of that sort;" and the patient, being a gentleman, said, "I have, indeed; I acknowledge that I ate half a savoy biscuit yesterday;" the other half of which was then upon the table. Now, please to mind, that I am convinced, that this is one grand cause of diabetes. They say, feed your patients as you like, there will still be sugar in the urine. I don't mean to say a morbid state of the kidney will not give it a sugary nature, but I am very much convinced in my own mind, that Dr. Rollo's theory is a very good one, and that it affords an ample explanation of the cause of diabetes, in the greatest number of cases, I will not say of them all.

Morbid Anatomy.—Having now done with the physiology of the kidney, I next come to speak of the morbid anatomy of the kidney, and here you have enlargement of the membranous part of it. In that membranous part there is every thing to be found that you have in the bladder, and therefore *stones* are as likely to form in the kidney as in the bladder; indeed it is reasonable to believe that many stones do pass through the *ureter*, and I shall call your attention to this point, that when a stone has passed through the ureter, you ought to tell the patient how he should endeavour to get rid of it. In the preparation I now show you, there is a stone completely obstructing the ureter, and just see how all the membranes are enlarged, how they are inflamed from adhesion, how rough the surfaces are, and how the glandular structure of the kidney is diminished in proportion; for if any thing prevents the function of an organ, so that it can be no longer useful in the animal economy, it is *absorbed*, and that is a very curious thing. Here is the case of an impervious ureter, and what has become of the kidney! The kidney is absorbed.

Then you have *abscesses* in the kidney; you have *hydatids* formed in the kidney, and various appearances of diseases, which are not in any degree remarkable.

With regard to abscesses in the kidney, they burst and discharge into the ureter; and here I should just like to tell you a case of that kind. A man whom I knew, not as a patient merely, but as a friend also, had diseased kidneys, and well he might, for he kept his *digestive organs* in a perpetual state of irritation. I am convinced that it is disorder of the digestive organs which generally produces disorder of the kidney; I am perfectly convinced of it. I should think there could be no reasonable ground to object to this proposition, for the kidney is supplied by the same ganglions, has the same nerves that supply the alimentary organs, and there-

fore it must sympathise with them. But, however, this man had had several times suppression of urine, and one morning he sent for me, saying, "For God's sake come, do come, and bring with you a catheter; my bladder is bursting, and I am in the most horrible torture." I went to him; I felt above his pubes, and I said, "there is no urine there; no, you are all wrong there;" and he said, "I am sure there is, and I must have a catheter introduced." I said, "I don't think there is; but, however, I shall pass a bougie;" and I pushed a bougie into his bladder, and gave him a chamber pot that he might try to make water. Now he voided a pint of *pus*, as good pus as ever I should wish to see; and for some time there was pus voided by him, mixed with his urine, and it went off. Also, I have known considerable *hæmorrhage* from the kidney, but this is not surprising.

Now I do not see any thing remarkable in the morbid appearances; it is that knowledge which looks to function, and the sympathies of organs with one another, that I consider the most important parts of the kidneys; this is what I have endeavoured, as well as I could, to explain to you, and I have done.

On the Female Organs of Generation.

Having gone through those functions which are necessary for the support of life, I proceed, in the last place, to speak of that by which the continuance of our species is effected; and I have, to-day, to describe the *female organs of generation*, which are, indeed, very simple; you know a great deal about them already, having seen them in their natural situation.

Os Internum Uteri.—It is scarcely possible you can fail to ascertain disease in the os internum uteri. Some people dwell a great deal upon this; because it happens, sometimes, that tumours displace the os internum uteri, put it aside; so that, if you find it where you do not naturally expect to find it, you may take it for some scirrhous disease. Now, I really think, there's little difficulty in medical men being able to find the os internum uteri, wherever it may be placed. It is not always *oblong*, it is sometimes contracted in the middle; but as the midwife teacher tells you all this, I do not think it necessary to dwell upon it.

Fallopian Trumpets.—The fallopian trumpets are exceedingly vascular, and we must allow them to have a state of vital action calculated for the function they have to perform. And this seems to be the most rational idea you can entertain of vital contractility throughout the body; that every part of it possesses that action, but in different degrees; and that its actions are suited to the part which it inhabits. Voluntary muscles act in a peculiar way, as they ought to do under the influence of the will; and involuntary muscles act in another way, suited to the part to which they belong. No doubt the action of the muscles, in this part, must be different from the common muscular action of the body; but, I think, a man must have a very strange mind, indeed, who will deny that blood-vessels have a vital contractility to answer their own purpose.

Ovaries.—Then what have I to say of the ovaries? They are *oval* bodies; and they say, about the size of a pigeon's egg; and when you cut them open, a kind of fleshy substance is exhibited, but there is nothing peculiar in it. Here are some cut open to show it; but really nothing can be made out of these parts, in the unimpregnated state of the womb, which I am now speaking of. The appearances of the ovaries of the human species are exceedingly variable: you sometimes see *cells* in them, and sometimes you do not; in animals they are more uniform: in them, they seem to be *fleshy* substances; and they say, cells may be seen in them with magnifying glasses. They are supplied by the spermatic arteries, and the blood returns by the veins. That's all I have to say of them.

Physiology.—Having described the structure of the female organs of generation, which seem to be as simple as can be, I now go to the physiology; and the first thing to be announced to you, and it need not be told, is, that the genitals of both male and female, remain in a dwarfish state, until the animal has attained nearly its full growth; that they then enlarge very considerably; that hairs grow about the pubes. From the follicles, leading off from the fundus uteri, a secretion takes place at this time in the female, which, when it is first poured forth, appears to be mere serum; but afterwards it becomes of the colour of blood, and is of as deep a red colour; and as the discharge dimishes, in the advanced period of life, it becomes serous again, and ceases. This discharge, at first, is irregular, but it soon acquires a very perfect degree of regularity, occurring at the interval of a lunar revolution, which has given the name *menstruation* to it, and which has led some foolish people to surmise, that it must be influenced by the *moon*; but a more ridiculous opinion never was broached; for if menstruation depended on that planet, it would be as regular as the *tides*, which are under the influence of the moon. Now, contrariwise, we know, that in every day of the eight and twenty, some woman is menstruating, and that there is no regularity in that respect. Then, what

is to be said concerning this discharge? Why, I believe, I may venture to say, that it is almost peculiar to the human race. It has been said, that Nature, ever provident, knowing that females must at times support an infant, has prepared a surplus of nutriment, which, when it is not wanted, is periodically discharged. Now this appears to be nonsense; because the human female is *moniferous*—at least, she seldom produces more than *two* at a time; whereas, a *sow* will produce a *dozen*, and yet she does not menstruate; so that Nature would seem to have acted in contradiction to herself. The only rational physiology of it is, as appears to me, that it is a means of relieving uterine irritation, and preventing that strong degree of desire, which would render the party *indecent*. You know how extremely urgent this desire is in the *brute* creation; there is no relief; and, of course, if a woman had no relief from this desire, she would go seeking the male as a *goat* does. (Laughter.) This, then, is a discharge which relieves uterine irritation—a discharge which is capable of reducing the vigour of the body. O, people have been examining this menstrual discharge, and declaring that it is *not blood*; and that it does not contain this, that, and the other thing: however, as far as I know, it does contain coagulable matter; and I believe the red colour, to be the colour of blood. It is notorious that women are weakened by it; there is that state induced, which tends to take away from venereal desire; there is a degree of weakness induced, and thus is the extreme of sexual desire mitigated in the female. I could produce many reasons for thinking in this manner: those females who have been educated without much attention to decency, generally menstruate early; and others who have been educated more decently, and in a more refined manner, do not menstruate so early. That uterine irritation, however, will bring it on, is proved, because females soon marry after it does come on; and, in the course of time, it will cease again. Now, it has always pleased me much, when I was able to show any thing relating to the human bodies, that seemed to have a reference to those social compacts which are established between us—any reference to morals. Animals, of course, have lawful impediments to premature copulation—lawful bounds; but there is no animal has such a bound, that I know of, as the human, the human being; and it seems to be part of the same ordinance, if I may call it so, of Nature; it is something that seems to relate to the moral obligations which belong to the human race. Now having told you what takes place at *puberty*, I need not go on to tell you, that when women are no longer able to have children, this discharge ceases.

Conception.—I next have to take notice of the changes which take place at the period of conception: but here I have always been accustomed to state what has been said relative to *generation*, a little historically, because it is a subject that does excite the curiosity of scientific men; and there are some subjects relative to general science, that it would be well if medical men would study, merely from *policy*: as, for instance, if a man of science found a medical man ignorant of the *eye*, ignorant of its operation as a *camera obscura*—wholly ignorant of optics, why he would despise him, and the medical man would get into great disrepute. If a lady found him ignorant of chemistry, that lady would never take any medicine of his compounding again; and ladies are critics on that point.

Well, then, I say, it is good to know something relative to the multiplication of the species. And I need not tell you, that the ancients had no distinct notions on the subject: they must have had some; they thought a seminal fluid was mixed by both sexes, and that by some process a young *turk* (laughter) was produced. But Harvey, the discoverer of the circulation, was the very first man who led the way to those speculations which have illustrated the process of the continuance of the species. Harvey was, indeed, excessively puzzled by what he perceived: and it is curious that Harvey wrote a book upon the generation of *insects*, and so on, and in which he had noted down all the facts he had collected on the subject, and that that book was destroyed. But Harvey was exceedingly puzzled about the generation of *oviparous* animals: he knew that a *cock* by one *strut* on a hen, would impregnate, perhaps, a dozen of eggs; and he knew that the *oviducts* of a hen lay high up in the loins, but how the seminal fluid could penetrate these ova in the hen, he was at a loss to know. Harvey could not discover the penis of a cock; and he thought that what was projected, if anything, seemed to be projected upon the common *cloaca* of the hen—that part which exudes the fæces, eggs, and all; besides, the whole was such a *touch-and-go* sort of business, (laughter,) that he could not satisfactorily account for the process. Now late experiments have shown what is the real fact, that in oviparous animals the semen is projected into a cell, that it is lodged there, and that as it descends into the duct, each ovum gets a touch of the seminal fluid, so that each egg is impregnated as long as there is any semen in the little reservoir. So that that mystery is now in a certain degree explained. Buffon has a theory of generation, which is a very strange one. I should say, however, that Leuwenhoeck, when he first began to use the microscope, found abundance of *animalculi*

in the semen; he found that there were more of these animalculi in a single *cod fish*, than there were inhabitants on the globe. Now such a man would seem to be, a man with *pudding* for his brains! A strange diversity of intellect he must indeed have. He thought these things were not all like the animals that contained them; but he supposed that one of them, more like the animal than the rest, might get lodged in the ovaries, and become more large than the rest. He said it was so in every thing, and that thus *seeds* were produced. But he seemed to know very well, that they did not resemble the animals; that they were something like *tadpoles*; and, moreover, that they did themselves propagate in the seminal fluid, so as to become multiplied. Now, I pause here, that you may think of this point, the absurdity—the positive absurdity of supposing that the *fœtus* can be formed by either parent. How can it be? What is the *testicle*; for that, undoubtedly, secretes the fecundating liquor? Is it not a congregation of vessels? Why, then, it must be formed, by aggregation of parts after the secreting process has taken place. And what is the ovary, but a vascular part? I say it is impossible, therefore, to suppose that a young animal can be secreted; it *must* be *formed*; and then the only question is, where is it formed, and how is it formed? That's a question which I shall have to discuss afterwards.

Leuwenhoeck met with these animalculæ; and Buffon met with others. In all liquors that are exposed, you have animalculæ. There is really an invisible world of vegetable animalculæ, the nature of which is as well understood by those who are in the habit of seeing them through the microscope, as we understand the nature of things which we see distinctly with the naked eye. There are indeed a great number of them. Buffon invented a theory respecting them, which some praised, but which I cannot praise; I take it to be all nonsense, and therefore I cannot speak about it. His theory was that these were things having power to conduct themselves so as to build up a body. Now, just after that, *De Graaf* was the proposer of that theory, which is now generally admitted: every one knows, there are some animals that are oviparous; but De Graaf asserted, that the viviparous animals, are in fact oviparous—that every female has the power of preparing an *ovum*, containing parts, which, under certain circumstances, will be led into a state of action which will produce young. Every one knows that an oviparous animal will bring forth her ovum, without any connexion with the opposite sex: shut up a young hen, and she will begin to lay eggs, though she never saw a cock in her life. So, in fishes: the male fish impregnates the spawn, without any connexion with the female. De Graaf says that it has taken place in the female, in the ovary; that it escapes from it through the Fallopian trumpet into the uterus, and lives and grows there. But whoever saw this? De Graaf affirms that he has seen it. Now every one can see, that there is good ground for De Graaf's theory to a certain extent, for there are little cells formed in the ovary which gradually approach to the ovula, and as they grow, they burst: this he affirms, he has seen, and therefore they have ever since been called *Ovula Graafiana*. When these cells break, they are filled up with another growth, which are called *corpora lutea*. When these cells are burst open, an inflammatory process takes place. Now, in the human subject we cannot make much of this. If in any animal, in a *virgin rabbit*, for instance, after she had taken the buck, you found four or five young ones, you would find four or five *corpora lutea*. But as to the ovula Graafiana, who affirm that they have seen it? I really don't know that any one ever did, till Mr. Cruikshank affirmed that he did in its passage through the Fallopian trumpet. And he said he found it in this way, by slitting open the Fallopian trumpet, and washing it with distilled vinegar. He says, that he concluded this was it. Now, I doubt all these things; I doubt whether he can see the works of nature, so as to speak of them positively. I am sure, in this state, it must be the merest atom imaginable, for John Hunter himself took home an uterus three weeks or a month after copulation, and though he slit it open and examined it, he could not find any ovula Graafiana. The history of that case was, that a young woman, supposing herself pregnant, had poisoned herself; that he was employed to examine the body respecting its condition with regard to the poison, and that he took home the uterus, but he could not find the ovula Graafiana. And we have some testimony from Harvey, to support the statement, that you cannot see it for some time; so that I doubt whether any body ever saw the ovula Graafiana. But that all this happens, you may be as certain as if you saw it; if you cannot see it with the eye of sense, you may see it with the eye of intellect. Nay, nay, you see it with the eye of sense, for some times the ovum grows in the ovarium; sometimes it escapes into the cavity of the abdomen, and sometimes it grows to such a size in the trumpet, that it cannot get through it, and then you have a Fallopian fœtus. Well, I say all this is proved, and you cannot doubt it.

Well, then, De Graaf was the proposer of that theory of generation which is now universally admitted.

Now, *Spallanzani* wrote on the subject, but I do not see that he has thrown any light on it. He has told a number of things, ridiculous enough. You know that when a frog spawns, it is seen swimming about with the male on its back; and it is curious enough that at this time the male has some sort of things that grow upon its hands, by which it attaches itself firmly to the female, and she is constantly obliged to swim about with him on her back, and as she gives off the ovaries, he besprinkles them with the spermatic fluid. Spallanzani put *breeches* (laughter) on the male frog, and the spawn was not impregnated. Spallanzani speaks of little *newts*, something like little *lizards*, with their heads placed together, and their tails apart; so that they are like a pair of compasses: now the female newt passes tapes of eggs, and the male impregnates them; the male puts the fluid into the water, and the newts are formed from it; but Spallanzani gets the fluid in the neat state, touches the eggs with it, and they are not impregnated, but he puts it into a bucket of water, and they are formed. I say, therefore, you must admit that the fluid has a specific stimulus, that it has a specific excitability. That's clear, because the fecundating fluid of one animal, will not fecundate in another genus of animals. Animals of a different species do fecundate, as the *horse* and *ass*, but it is curious that there is even a provision against the mixture of the animals: the mules are all formed with imperfect genitals, and cannot continue their species; as if Nature had said, thus far shall ye go, and no further. If the seminal fluid of one animal were capable of fecundating in another, there would be a great confusion of animals, there would be no distinct genera. I say you must admit that this fluid has a specific excitability.

Well, now, that's all I have to say about it. I don't condescend to mention some beastly experiments of Spallanzani. *Dr. Johnson* said of a certain nobleman, "he may be a wit among Lords, but he is no more than a Lord among wits;" so I take it, that this happy Spallanzani might be a philosopher among the ignorant, but he was not a philosopher among philosophers; he was not a philosopher among anatomists. He has told some curious facts, but I cannot think highly of Spallanzani, who nevertheless is praised for his experiments of production, reproduction, and I don't know what all.

Well, now I have given you this account historically, but we come to this after all—in what degree of perfection is this ovum, which the female has the power to prepare—to what degree of perfection can it be brought, without this stimulus imparted by the male? Now, I should be ready to believe that it might be brought to various degrees of perfection. I am more inclined to suppose that, from what I see in plants; but still I know nothing about it. I don't know how it is to be tried. When you take away the male organs, even in seeds, I can never see any thing of the *plumula*; at the same time I know nothing about it. But how are we to know any thing of it with regard to animals? Why, we must look, and observe; and then what do you see for instance, in the eggs of frogs? I am sure I don't know; there's something black in the middle of them, and that's all I can say about them. Then, when you get eggs upon a large scale, *crustaceous* ova—the eggs of geese, and such birds as those, one would think if ever there was an opportunity of examining any thing, with respect to this subject, you would find it in them, but that opportunity has not yet been sufficiently afforded; and therefore Mr. Hunter, who bestowed great pains and labour in making out what constituted the embryo in the eggs, it is curious enough to know, after having put up two preparations, after having had the best drawings by the best artists, after satisfying every body as to what he had done, it is curious enough to know, that that man was still, at the time of his death, working at the subject.

I believe, as this subject will occupy three lectures, for I cannot get through it in two, I shall stop here to-day, and go on with the subject at our next meeting.

SKETCHES

OF THE

SURGICAL PROFESSION IN IRELAND.

No. XVII.

The late Proceedings of the College.

Some late proceedings in York-street have turned my attention sooner than expected, from biography to first principles—from sketching likenesses, to meddle in the protraction of new constitutions. I say, sooner than expected; for who could have supposed that a system deemed incapable of improvement, should, at so short a notice, be abandoned by its admirers to the vicissitudes of a pretended reform? Assisted, however, by the microscopic vision of the law, the College have discovered that their

charter is so unfit for all useful purposes—so far behind the improved views of the day on such matters, that it has become absolutely necessary to have the instrument of their incorporation cast anew in the foundry of Royal privilege. From this examination of the precious document, it appears that the Court have been committing the most awful infraction of the laws of these realms, by propounding to candidates certain questions unwarranted by any deed of authority. No knowledge, in fact, of medicine, chemistry, botany, or of the other various sciences, a smattering of which goes to make up the intellectual stock-in-trade of even a mere surgeon, could be demanded of pupils, by virtue of this monoculous charter, which looked only to the interests of pure surgery. Besides this obvious imperfection, all persons, except the apprentices of the College, were excluded from examination—a restriction which to many appeared a very unnecessary limitation of power. These were serious defects in a charter, as an agent of general business, and it, consequently, became a matter of necessity, as well as of policy, to have them forthwith remedied. As the first step, in the attainment of this object, numerous meetings were held, and the discussions protracted beyond the usual hour of debate. The result of all this deliberation turns out to be, that a new charter is to be sought with more unlimited powers—that all persons qualified are to be admitted to an examination—but, that those only who are educated according to the old system are to constitute the members, and to be eligible to office—that the Court of Examiners are to be dignified with the title of Fellows—and, as a compensation for the anticipated loss of apprentice fees by this arrangement, the proprietory of the Dublin hospitals are determined to raise still higher the pathological tax on the mere diplomatists whom this new scheme of finance will call into existence.

Such is a brief summary of the present intentions of the College; but while the old system is still in a state of dissolution, it may be worth while to inspect the new chimera evolving from the decomposed elements of its parent, and calculate its probable influence on the future profession of Ireland.

It can never, perhaps, be too often repeated, that it ought to be assumed as an axiom in all discussions upon the economy of the medical profession, that all the dissensions which have distracted it in these countries, are primarily attributable to the British Government, who never, at any period, took up the subject of medical legislation, and considered it in a proper light. Instead of explicitly defining the corporate duties of the various bodies included under the above general head, whether apothecaries, surgeons, or physicians, they not only granted to these bodies the most contradictory privileges collectively, but endowed each of them separately with the fatal power of degrading their own members. They furnished these parties not only with the weapons of mutual aggression, but also with the means of self-destruction. All these corporations evince, throughout the greater part of their history, the extraordinary anomaly of a body of men legislating for themselves, uncontrolled by any respect for the interests of society. They were, for the most, the contrivers of their own charters and acts of parliament, which were no sooner presented to the legislature, than they were imprudently sanctioned without examination into their ultimate effects. Proceedings so diametrically opposed to all rational principles of jurisprudence, could not but produce the worst consequences. For, what would be the result, were shoemakers and joiners permitted to manufacture acts for the exclusive protection of their respective trades? obviously, that we might walk without shoes, and go to the grave without a coffin. Yet this is, in principle, precisely what has occurred in the medical profession, though the public indirectly stand as much in need of lectures as of leather, and would, probably, prefer a speedy recovery, to a coffin at the most reduced prices. The grand objects in every specimen of this self-legislation, which the world has yet witnessed, are, first, how far the party suing for a charter, or an act of parliament, can injure a rival establishment; and, second, how they can confine to a few, the advantages thus obtained over their neighbours. The grounds upon which these opinions are founded, have been so often, and so much more eloquently expressed in the pages of this Journal by others, than the writer could pretend to do, that he will pass on without any attempt to support the theory obscurely traced out in the preceding observations by facts, to apply it to the contemplated arrangements announced in the title of this paper.

It is quite evident that the Royal College of Surgeons in Ireland, stand in the same predicament as all their predecessors, of legislating for themselves, and that they are likely to fall into similar errors. The resolutions, indeed, and the motives in which they originated, are both conclusive on this point. For, though the defects of the charter are put forward to justify the intended alterations, self-defence against the London and Edinburgh Colleges of Surgeons, is one of the principal causes of the

change. These institutions, say the promoters of the project, traffick in licenses, make an inferior caste of practitioners, have fellows, and why not we do the same? thus adding another example, to the many already on record, of the salutary effects of self-legislation, and mutual aggression. Their hostility to these rival institutions, however, in depriving them of some Irish customers will not stop there, as an examination of the propositions of the College, will hereafter show that they mean to adopt for their motto, "fas est et ab hoste doceri," in various other respects also; and honourable models, truly, have they taken for imitation! In the first place it is intended by one of these measures to abolish, and, at the same time, to retain apprenticeships. Indentures are necessary to the education of pupils, or they are not; if they are necessary, the College is guilty of the grossest treachery towards society, by their abolition; if useless, why are they at all retained? Yet while the College, by their present proceeding, openly avow the latter to be the case, they offer a bounty, on compliance with an exploded practice, by making it the only means by which men can arrive at office and distinction in that body. In whatever manner the College may attempt to escape from this dilemma, the results, at least, of their contradictory but ingenious scheme are plain enough. The consequence of the measure will be, that few pupils, out of pure love of having a master, will choose to pay a hundred and fifty guineas fees, and that none but the immediate connexions and relatives of hospital surgeons in Dublin, who are generally taken free of cost, will comply with the old system of education. The number of members eligible to office, and having a right to interfere in the affairs of the College, will thus ultimately so decrease, that it will eventually present the same spectacle as that of London does at present. But will this clause of the new code, produce any advantages pecuniary or scientific to pupils, to counterbalance the evil of the College becoming the hereditary property of a few surgeons resident in the city? Undoubtedly not; for, with respect to the expenses of education, they will remain nearly at the old standard; and as to the opportunities of instruction, they will be placed still farther beyond the reach of the majority of the pupils. Thus, if a pupil spends four or five years in one of the large hospitals, (and less cannot qualify him to undertake the duties of his profession,) he will have paid just the same sum for his information, as if he had purchased his freedom of one of these establishments, by feeing a master. But will the pupil pay this sum for an hospital, now that the expenses of attendance are raised, and the necessity of doing so being removed? Most certainly not; for we do not find that pupils do so at the present rate, and it may be presumed that they will be less inclined to do so, when the charges are made higher.

It may, therefore, be concluded, that as far as the partial abolition of apprenticeships, in the manner contemplated, will have any operation, the effects will be injurious, first, to the College; secondly, to the pupils; thirdly, to society; and lastly, that they are likely in the aggregate, to prove that the aggrandizement of a few individuals at the expense of the multitude, is one of the necessary consequences of corporate legislation.

That these are the effects intended by the adoption of the measure, the conversion of the Examiners into Fellows, affords a further corroboration. The very name, indeed, sounds suspiciously, being associated with all sort of low-bred, back-door, sycophantic chicanery. The character of the Fellows of the College of Physicians, and the treatment of Dr. Grattan, who has just obtained a signal triumph over Sir Patrick Dun's legatees, ought surely to warn the surgeons of Dublin against introducing such titles amongst them. It is true, the surgeons have no farms to let; no poor-box money to hire out at interest; but Dr. Orpen's "Charitable Agency Office" may afford examples for imitation in matters of a purely temporal nature. As soon as things are ripe for the deed, these same Fellows will make themselves perpetual, and elect each other, unless human nature, in the interim, returns to its pristine purity. The diminution of the number of members in consequence of the abolition of apprenticeships, will render this evil of facile accomplishment. But even though this probable event should not take place, the decorating of any set of men with titles, but those which express the nature of their duties, is merely to excite jealousies and perpetuate discord. The members of the medical profession are at least sufficiently informed to understand their self-importance, and the relation in which they stand to each other, never quiescently to tolerate an aristocracy in science. They may bear the superiority of intellect, the splendour which genius casts around it, but a system by which their equals at best, perhaps their inferiors, can be elevated above them, they will not contentedly suffer. What is it but this instinctive resistance, excited by artificial distinctions, which has filled the pupil's pen with indignant acerbity—inspired the professor's tongue with a more energetic eloquence, and thrown the whole profession into a sort of civil commotion? Enter the class-room, are not these distinctions in

nine cases out of ten the themes of juvenile disputation? Take your seat in the council chamber, are they not the topics of senile debate? Listen to the Press, does it not torture the ear with eternal peals of complaint? These are not the symptoms of wanton disquietude, of a restless impatience of subordination, or of an avidity for mere change: they are indications of a deep feeling, roused into action by the general violation of the great principle which should regulate the economy of the profession; the equalizing the chances of success in life by an equality of title, education, and rights. As long as this law is violated, not only amongst the members of each College, but as long as any disparity of privilege exists between the several Colleges in their corporate structure, a flame of discontent will continue to burn, which nothing less than the arm of the legislature will be able to extinguish.

The Court's assumption of the character of Fellows being uncalled for by any necessity of the body, intended, probably, for self-interested purposes; useless at best in its effects; most likely injurious in its consequences; certainly not calculated to reconcile men to its adoption; manifestly unprofitable in a scientific light; and contrary to all the dictates of sound policy: such alteration, in whatever point it is considered, may be rationally expected to illustrate further the influence of self-legislation.

Connected with the fellowships, stands the preposterous resolve of a further extortion on hospital attendance. The mind, indeed, passes from the one subject to the other, as readily as electricity through the links of a conductor. There is a continuity of design, a sympathetic communication between all the parts of the project, that insensibly leads you on from one to the other of the series. It is quite clear these law-givers work solely for themselves, as appears from this balance of evils. If they give up one exaction, they must be indemnified for the loss by an equivalent impost. They mercifully exchange the site of the exchequer, and declare the tax repealed. Kind souls! instead of a hundred and fifty guineas being sunk at once in the affections of a loving master, about the same sum is now to be paid in "gales," like the Catholic Rent at Stevens's Hospital. Yet the junior members of the profession in Dublin sit with their arms folded, while Mr. Colles and his "corps dramatique" are rehearsing such a farce in their presence. Why is it that so many young men in Dublin, whose time, talents, and other qualifications conspire to render them the most eligible instructors of youth, have never an apprentice? They are referred to the game of profit and loss, just played by the hospital financiers, for a solution of the question. They are now, however, in a worse position than ever, for while the obligation is entirely removed, the expense of an hospital has destroyed all inducements of becoming an apprentice. And this measure, forsooth, is intended as a public benefit—as an opiate to tranquillize the passions of the multitude—a measure which tends more than ever to increase the number of Mr. Cusack's apprentices from forty-two, (as the writer ascertained a few days back by a reference to the registry book,) to twice as many, while others have none at all. This is the measure which is to protect pupils in Stevens's from Mr. Colles's sneer, if they presume to ask him a question, and to place them under the tuition of men whose interest it would be to treat them with respect. Supported by such a law, well may he on those occasions summon his fortune into his face, and fling a purse-proud sarcasm in a student's teeth. Scarcely less ridiculous is the idea of assisting by the new regulations the progress of Dublin into a great school of medicine, with which they have at least been associated in conversation. If by a multitude of pupils, cheap licenses obtained without qualifications, dear pathology and consequent ignorance, it is meant to establish a great school of medicine, then, indeed, these measures are admirably adapted to produce such a happy combination of circumstances; but such a great school would undoubtedly be, like a great book, a very great evil. Dublin possesses some reputation in medical science; but if it be contemplated to extend its fame, by converting it into a mart for the sale of diplomas, like London and Edinburgh, then let Dublin remain as it is at present. The writer is not so destitute of the "amor patriæ," as not to wish that the college of his country would be equal, if not superior, to every other; but he cannot in these new arrangements, or in the presence of a great number of Scots and English students, seduced over amongst us this season by the anatomical attractions of Bully's Acre, discover any indications of the accomplishment of so desirable an object.

EBIENSIS.

Dublin, March 1827.

(To be continued.)

REVIEW.

A Physiological Inquiry respecting the Action of Moxa, and its Utility in inveterate Cases of Sciatica, Lumbago, Paraplegia, Epilepsy, and some other painful Paralytic and Spasmodic Diseases of the Nerves and Muscles. By WILLIAM WALLACE, M.R.I.A., &c. &c., Surgeon to the Charitable Infirmary of Dublin, and to the Infirmary for the Treatment of Rheumatism and Cutaneous Diseases in that City. 8vo. pp. 148. Hodges and M'Arthur, Dublin; and Longman and Co. London. 1827.

THE ancient *Moxa* had never a better advocate than Mr. Wallace, but we question even if his advocation of its virtues will woo the world to reverse the judgment which seems to have passed against it. It appears that *moxa* has routed sundry old aches and pains, and a pack of chronical disorders not very easily defined, "of the nerves and muscles;" and Mr. Wallace seeks to show, that they were not panic stricken at a piece of burning cotton, but capitulated in the regular way—marched out with all the honours of war. The times are gone by, notwithstanding what Johnson would asseverate to the contrary, when charms and incantations, or even the prayers of Hohenloe, will be allowed to avail in medicine, whatever they may in other matters,—where there is an effect, people naturally suppose a sufficient cause. Now Mr. Wallace is pledged to this, so much so, that he will not allow "any functional disease without organic derangement," (by which we understand disease, for if we suppose less, "*organic* derangement" is "*functional derangement*," and nothing more), and seeks, naturally enough, to inquire into the *action* of moxa, seeing that it has been of very prodigal service. "Holding in view the conclusion, that all diseases are essentially vascular or structural, and that the grand principle of their treatment consists in the restoration of the vascular solids, which are the seat of disease to a state of healthy action, together with the removal of their cause," he proceeds to the *modus operandi* of moxa. This, in effect, is contraction and increased action of the capillary plexus, as Mr. Wallace has shown, analogically, by certain experiments of Dr. Hastings, performed on frogs' feet, and specially by others performed by himself on patients in the Jervis-street Infirmary. Premising that it is sought to be proved, that a certain quantity of caloric contracts the capillaries and quickens the circulation of a part, we give the following result of an experiment made on a patient with an ulcer on the leg, "the granulations being exuberant and spongy," much disposed to bleed, and the surrounding integument "thin, of a brownish colour, exhibiting numberless minute vessels in its texture:"—

"The size of the capillary vessels in the ulcer having been previously examined with a lens, I burned a moxa over the surface, gliding it along during its combustion, *and holding it at such a distance as to produce a keen feeling of heat.* When the moxa was burned out, *a diminution in the size of the capillaries was evident.*"

In a case of chronic inflammation, with dilatated capillaries of the conjunctiva, he applied a moxa to the eye, or rather over it, in the same way, and "*a contraction of the capillaries of the conjunctiva resulted*;" and such would have been the effect of hot water, as every body knows. How the burning of moxa *over* a part can be better than heating it in any other way, we shall not pretend to determine; let us see, however, what may be the effect of "moxabustion" *on* the skin, and through it on remote parts. *Ignis firmat partes*; but, says Mr. Wallace,

"- - - - - - are its effects limited to the point to which it is directly applied, or do they extend more or less beyond this point? For it is evident, that if its influence be limited to the surface of the skin, or to the part to which it is directly applied, it can have little or no effect on deep-seated or

extensive disease; but, on the other hand, if it be capable of extending its influence to the deep seated parts, it becomes a most important agent, because it may be said to be, perhaps, the only one we are acquainted with which has this power, and which is possessed of the same mode of action."—p. 39.

The doctrine of the author is explicitly this—that the action of moxa on the skin, which is that of a local tonic or astringent, is exerted by continuous sympathy on internal parts, acting there as *locally* as it does at the *punctum saliens* of its operation; indeed, he seems to think that it acts on "deep diseases" (p. 31) "as our most valuable *topical* remedies act on those which are *superficial!*" We would not, willingly, misrepresent him, but it appears to us he errs in supposing that the capillaries of internal parts are all, or a great many of them, to be influenced by heating or burning, as the case may be, the little coterie of superficial vessels which may lie under a cylinder of moxa. But he does not appear to have any very clear ideas on the subject, for at p. 40, he says, "if moxa be applied through the medium of a needle, the caloric may be made to extend its influence as deeply as we please, *by the conducting power of the needle*;" thus implying, that there is not the conducting power in the capillary system or continuous sympathy in other structures, that was sought to be found.

In another case, says Mr. Wallace,—

"When an ulcer, which was on the breast, was in the state described, (soft, pale, and disposed to bleed,) I burned a moxa over it, *at such a distance as to excite the feeling of pain*, without producing any disorganization. On the following morning, the effect was most remarkable; the granulations of the part, and beyond the part, to which the moxa was applied, were sunk below the level of the surrounding skin, and might be almost said to form a little well, which lodged the matter. This experiment I repeated on other parts of the ulcer, and for several days in succession, and always with the same result."—p. 45.

So much for the "objective moxa," and upon the principle of "lucus, from no light," it is "objective" enough, God knows. A taper, or heated spatula, or indeed any thing hot, must assuredly answer quite as well. "Caloric," says Mr. Wallace, "acts as a local tonic," and so does sulphate of zinc, and that is enough. But although we object to the "objective moxa," we are by no means prepared to state, that when actually applied to the skin it may not be of service. In sundry instances related by Mr. Wallace, it has made the halt to walk easily, and the paralytic to limp; so that we are bound to give our readers some little account of the mode of employing it, and the author the credit of the best intentions in publishing the numerous cases with which his volume abounds; we must add, that several of them were treated by other practitioners, and by the usual means, without success. In the first place, a caution must be laid down,

"- - - - - that this remedy shall never be employed in cases of increased action, or of active inflammation, or even in cases of subacute inflammation; that is, when the acute inflammation is lapsing into the state of chronic action; and this principle should be implicitly adhered to, whether the active inflammation has attacked parts previously in a state of health, or has supervened on the state of passive inflammation."—p. 50.

Mr. Wallace goes on to describe, first the moxa, and then the apparatus for applying it:—

"We should select a substance, whose combustion will take place slowly, but steadily. If the combustion be too quick the effects will be too transitory, and if too slow, it will require the use of the blow-pipe, which complicates the operation, and unnecessarily alarms the patient. I have been fortunate enough to discover a mode of forming moxa, which is free from both objections: it burns slowly, but steadily, with the assistance of the blow-pipe if we please, without any sparks, without the least trouble to the surgeon, and without alarm to the patient, for its combustion is scarcely observable. It is formed by immersing either surgeon's lint, or fine linen, in a filtered solution of chlorate of potash: the solution being made by dissolving one drachm of the salt in four ounces of distilled water. When the moxa is to be used of a

small size, fine linen will answer best, but when of a large size, lint is to be preferred. Care must be taken that the substance used shall be perfectly dry, before it be folded up, and in folding it, a proper degree of firmness must be given, which experience will soon teach. After the substance has been rolled up and fastened with two or three stitches of the needle, its end should be cut with a very sharp knife, to make it perfectly level, and thus secure its application to every part of the skin upon which it is placed. Its length should be about three-fourths of an inch, and its diameter may vary from one quarter of an inch to an inch.

The instruments which I use in applying the moxa are of the most simple kind: a porte-aiguille, which I have invented, or a pair of dressing or artery forceps, furnished with a screw at about three-fourths of an inch distant from their point, which screw serves to press the blades of the forceps very tightly together;—a bit of small, flat, silver wire, about three inches in length;—a bit of card paper;—a blow-pipe; a set of needles; and a small glass tube, are all that are required. With the silver wire a small hoop is formed to grasp the moxa: the size of the hoop being made to vary according to the size of the moxa; and the ends of the hoop are grasped in the forceps, which are made tight on it by the screw with which they are furnished. The hoop should be applied about a line distant from that end of the moxa which is to be placed on the skin, for the purpose of preventing any inconvenience from the hot wire coming in contact with the surface. In fixing the ends of the hoop in the forceps, such an angle or inclination of the moxa with the forceps should be given, as will be found most convenient for the exact application of the moxa to the part affected.

"The moxa should be applied, in painful affections, to the point where the greatest distress is felt, if it be possible so to do; and in paralytic affections, it should be first applied over the origin of the nerves which lead to the diseased parts, and afterwards along the same nerves in different parts of their course. Those continental surgeons, who have given directions respecting the application of the moxa, have spoken in a particular manner of the parts to which it is proper to apply it, and of the parts to which it should not be applied. On this subject it is not, in my opinion, necessary to enlarge. In these countries no one will use it, unless such as are acquainted with the anatomy of the parts upon which they are operating; and to them it is unnecessary to say any thing. Moreover, as will just now appear, there is scarcely a part of the body to which it may not be applied in one form or another: even to the eye it may be applied in the form of the objective moxa, as I have often done, with great advantage, in some cases of obstinate chronic ophthalmia.

"The size of the moxa, the manner in which it should be applied, and the length of time it should be allowed to remain on the part, are points of some importance. All these circumstances must be regulated by the depth of the disease, and the nature of the parts, to which we may wish to apply it. It may be used, so as not to cause any injury of texture; in a greater degree, so as to produce vesication; and in a still greater degree an eschar, and the eschar may be either deep or superficial; or, lastly, it may be employed in conjunction with the acupuncture needle. These different modes of using the moxa may be distinguished by the terms, first, second, third, fourth, and fifth forms of application.

"The first form of application will answer when the disease is very superficial. It constitutes the objective cautery of the French writers, and is highly extolled by Faure, in the Mémoires de l'Academie Royale de Chirurgie, tome 15, 12mo., as a powerful remedy for the cure of ulcers. It may be serviceable in neuralgia, when the nerve is very superficial; or in affections of the joints, when the synovial membrane is immediately under the integuments, as is the case in the knee and wrist. When used, it should be repeated at least once a day, and applied by holding the moxa in the forceps, as close to the part as the patient can comfortably bear; at the same time it should be moved slowly over the surface, backwards and forwards, until its combustion has terminated.

"I seldom have recourse to the second form of application, because it is not so effectual as the third, and it is more troublesome in its after treatment. It may, however, be usefully employed in tic douloureux, and to those parts on which the patient would not wish a cicatrix to be formed. In such cases the moxa is applied by holding it steadily, and as close as possible to the skin, without allowing it to touch it, and until the skin appears white; which appearance is owing to the detachment of the cuticle, and the formation of a blister.

"In a large proportion of cases the superficial eschar will be the best form of application. To produce this eschar, the moxa must be placed on the skin, and allowed to remain on, until the skin appears brown under it; which will, in general, be found to take place when the combustion of the moxa has extended to the distance of about a line from the skin.

"The deep eschar will be required, when the seat of the disease is far removed from the surface, as in affections of the spinal

marrow and of the hip. To form this eschar the moxa must be allowed to remain on until its combustion is complete, when the part upon which it was seated will be found black, and the surrounding skin slightly red and wrinkled. In this form of application, it will be sometimes useful to increase the intensity of the heat by the employment of the blow-pipe; and when this is thought prudent, the moxa should be, previously to its application, surrounded by a cylinder of card-paper, which will have the effect of directing the current of heat downwards, and prevent its escape laterally.

"When our object is to obtain any of the effects last described, it will be advisable, previously to the application of the moxa, to mark the spot on which we may wish to place it, with a little circle of ink; and in case of using the blow-pipe, we should cover the surrounding parts with a piece of paper, having a hole in its centre for the moxa; the paper having been previously wet in a saturated solution of the sulphate of alum, or muriate of soda, and afterwards dried.—These solutions diminish so much the combustibility of the paper, that it will prevent it from taking fire, in case a spark should be driven off the blow-pipe.

"On several occasions, as for example, in paralysis, and some obstinate forms of sciatica, the frequent repetition of the moxa will be required before the disease is subdued; and the disease is so far removed from the surface that, to act on it, an eschar must be produced. When the eschars are thrown off ulcers are formed, and where they are very numerous they cause considerable irritation to the patient, and the discharge produced by them may be more than is suited to the weak state of his system. In these cases the application of the moxa, in conjunction with the needle, will be found a most excellent mode of using the remedy.

"When the moxa and acupuncture needle are used in conjunction, the follow-is the mode of operating:—I perforate a moxa of a proper size by a needle, of such a length as will be sufficient to reach to the seat of disease, and at the same time extend so far beyond the surface of the skin, as to keep the moxa about one inch from it, or so far as to secure the texture of the skin from injury. The needle is then introduced as far as the seat of disease, by the assistance of the porte-aiguille; and, as soon as it has been introduced, the porte-aiguille is removed, the needle being left in the part. The moxa, which had been previously perforated, should be now placed in a state of combustion on that end of the needle which projects beyond the surface of the skin, and allowed to burn round the needle by which it is thus transfixed. The heat disengaged from the moxa is communicated to the needle, and thence conveyed to the seat of disease. When the needle has cooled it is removed, and the wound or eschar produced by it is scarcely observable. I have also employed, with remarkable efficacy, the preceding mode of using the moxa, in cases which require the intense application of this remedy; but in which the texture of the skin could not be injured, nor an eschar, with propriety, formed.

"It is recommended by Larry, that immediately after the application of the moxa, the skin should be wet with the water of ammonia, and this for the express purpose of preventing the occurrence of inflammation: the very effect, which those who do not understand the mode of action of moxa, are desirous of producing!! Upon what principle the Baron expected such a result from the application of ammonia, I know not, for he has not made any remark upon the mode of action of this application. Its effects are, however, such as he states, and clearly explicable, as will hereafter be proved, on sound physiological ground. It will, however, answer the same purpose to apply any other powerful stimulus. Alcohol, æther, turpentine, ammonia, may be indiscriminately used; or even bruised garlic, which Ten Rhyne recommends in his work De Arthritide. The neatest mode of applying the water of ammonia, alcohol, &c., is by a glass tube. The fluid ascends in the tube, as soon as it is placed in the bottle containing it. The operator should then put his thumb on the end of the tube, while he lifts it from the bottle, and thus retains in the tube a sufficient quantity of the fluid, which he can then allow to drop on the surface of the skin as he pleases. I may here mention, that I have found tubes of this kind extremely useful, for the purpose of dropping fluids into the eye.

"In the first and last modes of applying the moxa, no after-treatment is required, farther than the temporary application of the stimulants just mentioned. When eschars are produced by the application of the moxa, the part should be kept covered by a piece of adhesive plaister, until the eschars are separated. This separation will generally take place in the course of eight or ten days, but sometimes not for double this period; and it is remarkable, that the moxa acts more favourably in those cases, in which the eschar is thrown off very slowly, than in those in which its separation takes place with rapidity: the reason of this will appear hereafter. The superficial ulcers, which result from the separation of the eschar, as also the excoriation, which follows the vesication produced by the second mode of applying the moxa, should be washed once or twice a day until they are healed, with a solution of the nitrate of silver, or

sulphate of copper, and covered by adhesive plaster. The ulcers left by the separation of the eschars will always be found much less deep than might have been expected, but greater in their superficial extent than would be supposed from the appearance of the eschar; and they will, therefore, in general, require some days for their cicatrization."

Instead of the scarificator commonly used in cupping, Mr. Wallace recommends an instrument resembling a gum lancet, as used by Larrey; he has also adopted a new method of applying lotions, which, at least, possesses the merit of constancy. Skeins of cotton are immersed in a bottle of lotion, and made to hang over the part to which the fluid is meant to be conveyed. When warm epithems are required, the bottle is placed in a tin pot, over a lamp; so that whether cold or hot, a part may be kept wet without trusting to the somewhat uncertain vigils of the night nurse. Mr. Wallace speaks among other things of friction, shampooing, percussion, massing, &c., and there are numerous practical remarks of value scattered up and down his more useful than ambitious work.

A Correspondent, who signs himself "Non-Medicus," (what else he is not we forbear to mention) complains that our observations on Mr. Bell's case of double hernia, (p. 706,) "seem to imply that Mr. Bell had the entire management of the *disease*, and, consequently, that he only was responsible for the safety of the patient. This (says the Arcadian) is a wilful perversion of the truth; it is evident, from the statement, that he was completely overruled by the opinion of the Senior Consultant," &c. One thing, then, *at least*, is evident to "Non-Medicus," that Mr. Bell, no matter wherefore, was wrong, and that is sufficient. "Senior Consultant," indeed, and "nearly absolute reliance," are truly pretty extenuations of neglect or ignorance, or both. The patient, it seems, was lost "from the unimpressive nature of the symptoms"—"*unimpressive*" as compared with the absolute reliance which Mr. Bell placed on the obtuse intellect of his "Senior Consultant," and the little, in this case, that availed him of his own.

Some eleven years since, the Pupils of Guy's and St. Thomas's Hospitals subscribed their guineas for a portrait of Sir Astley Cooper, but to the present hour no portrait has been forthcoming, nor perhaps ever will. Mr. Key, they say, was the treasurer, and we trust he will attend to the subject.

Sir Anthony Carlisle.—"Are we," says a Correspondent, "to have female practitioners in physic? Has the lancet been taken from barbers' hands to be placed in those of women? Are we to have a female anatomical school? for surely it must be the height of indecency to allow hospital students to dissect the bodies of deceased females? Are we to have female lecturers! Gentle Oyster, say!"

Refering to a case of triple dentition, at page 668 of our present volume, Mr. Snell of Crawford-street, adds the following:—

"A young lady," he says, "applied to me to extract one of the anterior temporary incisors. About a month after, a supernumerary tooth came down in the place whence the temporary one was removed; this being a conical ill-shaped tooth I removed it. In about three months afterwards she called, when, to my astonishment, another tooth had come down in the place of the former; this I also removed. It was now nearly twelve months before I saw her, when she again called on me, and I then found that the regular permanent tooth was coming down. This shortly ranged regularly in the proper situation, and was as perfectly a formed tooth as its fellow, which had long before come down in its place. I have met with two cases of this kind during my practice."

It seems that certain of the London Hospital Pupils have held a meeting for the purpose of expressing themselves satisfied with the conduct of Messrs. Luke and Hark-

ness, the lecturer and demonstrator. "We can assure you," they say, "that much as we admire Mr. Headington as an instructor, and highly as we value the large stock of practical information which his extensive experience enables him to communicate, we consider that his place cannot be more ably supplied than at present."! All this may be very true, but supposing all the pupils to have signed this complimentary effusion, which was not the case, what reference has it to the conduct of Headington? We believe that Messrs. Luke and Harkness are praiseworthy teachers, but we know that many of the pupils are dissatisfied, and well they may be, upon the principle, that a man who does not get what he purchases is cheated—having fee'd Headington, they naturally expect his advice.

We really commiserate the situation of a Correspondent, who, it appears, was induced to pay his money to a certain anatomical teacher, at the West End of Town, through an advertisement, or "puff," on the Wrapper of this Journal, (in the conduct of which we may state, once for all, we take no part,) and has met with nothing but neglect and ungentlemanly treatment in return. Joe Burns says something about windmills being nothing without puffs!

Mr. Frederic Lobte Probart, of Hawarden, North Wales, has sent us the following case of *Spina Bifida*:—

"A child, the subject of the above complaint, son of Martha Davies, living at Kinnerton, was born on the 23d of December, 1823; I attended the woman in her labour, and owing to the child's head being firmly impacted in the pelvis, and her pains weak, was under the necessity of having recourse to the forceps to expedite her delivery. The head was large, and the anterior fontanelle more open than usual. Soon after the birth, my attention was drawn by the nurse to a transparent tumour of the loins, situated on the second lumbar vertebra, rather of an oval form, soft, elastic, and compressible; the lower extremities evidently much influenced by it, so that the paralysis was complete, and the limbs perfectly useless, admitting of being twisted in any direction. I ordered a soft compress to be applied over the tumour, the loins to be encircled with a flannel bandage, and any further proceedings to be deferred until the child was a little older, and the mother strong enough to attend to it herself.

On the 14th of March, being then about ten weeks old, he was brought to my house. I was astonished at his general healthy appearance and lively countenance, as I had ascertained a day seldom passed without more or less of convulsive attacks; yet he continued to take the breast greedily, came on well, and the fæces and urine were under the influence of the will. The tumour was increased in size, but not considerably, since the boy's birth, and its general appearances were the same. Upon pressure, the fluid it contained receded, and the finger could be readily passed into the spinal canal; a circumstance always productive of pain, followed by convulsions of a minute or two's duration. I pointed out to the parents the dangerous tendency of the disease, and the probability of the case terminating fatally, when, at the earnest entreaty that I should try every expedient that could be devised for the restoration of the child, I determined on pursuing the method recommended by Sir A. Cooper in a similar instance. I made six punctures in the tumour, by means of a very fine needle, from which escaped about ten drachms of a colourless limpid fluid, the patient appearing to suffer but little from the proceeding. I then applied a soft compress of linen, and a flannel bandage.

On the 20th, the tumour had not decreased nor changed its appearance, and the orifices were healed; the compress was completely saturated with moisture on the second day after the puncturing, so that a good deal more fluid escaped. Punctured it again in six places, when the discharge was nearly the same as in the first instance.

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On the 28th, I was sent for in great haste to the child, the father assuring me that he did not think we should find it existing, from the violent convulsions it was labouring under when he left home. On my arrival the paroxysm had ceased, but a great deal of strong constitutional excitement remained. I had him put into warm water for twenty minutes, following it up by an enema of ol. ricini., ol. terebinth. a. ʒj. in gruel, which brought away a copious green motion. In the tumour a considerable change had en-

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On the 29th much better; had only one convulsion in the night, of a description milder than he had usually suffered from; the inflammation better, and the tumour evidently smaller. Ordered hydr. c. creta, gr. viij. h. s. s., and the injection to be repeated if convulsion returned.

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April 3. The child was in all respects better, the countenance cheerful, bowels natural, and the tumour reduced to less than half its original size; left off poultices, and applied the emplastr. hydr. c. ammoniac. upon leather, over it a compress and bandage. From this date the little boy gradually recovered the use of his limbs; absorption took place, and at the latter end of the month, a depression only was to be seen on the part affected; the skin a good deal puckered, and somewhat tender to the touch.

The child remains perfectly well. February 18th, 1827.

CAROTID ANEURISM.

Case of Aneurism at the Root of the Carotid Artery, successfully treated by tying the Artery above the Aneurismal Tumour. By JAMES LAMBERT, Esq. Surgeon, Walworth.

NOTWITHSTANDING the treatment of aneurism since the time of John Hunter has undergone material improvement, and surgeons now unhesitatingly apply ligatures to the largest arterial trunks of the body, yet there are many cases of aneurism still regarded as *inevitably* fatal; as, for example, aneurisms at the root of the carotid artery, of the arteria innominata, and of the subclavian and iliac arteries, when it is impossible to adopt the ordinary method of applying a ligature between the tumour and heart. I possess notes of many such cases treated in the hospitals of this town; they were set down on high authority as "absolutely incurable," and the patients were abandoned to their fate. That such cases, however, are not absolutely incurable, it is the object of my present communication to show.

The principle on which an artery leading to an aneurismal tumour is tied between the heart and the disease, is well known to be that of staying the flow of blood into the tumour, by which means the coagulation of the blood within the aneurismal sac is permitted, and this blood first becoming consolidated, is afterwards removed by a process of absorption; the sac is obliterated, and the cure thus ultimately effected. A knowledge of such being the curative process, was obtained from the actual observance of those cases in which a spontaneous cure was going on. It is, therefore, matter of surprise, that it never occurred to surgeons that the same results would ensue from the application of a ligature beyond the tumour, and that such a mode of treatment should be adopted in cases where the artery could not be secured between the tumour and the heart. For, as Mr. Wardrop* has justly remarked—if we suppose a case of femoral aneurism in the middle of the thigh, "it is as easy to imagine that the blood contained in the space between a ligature placed *below* the aneurismal tumour, and the first arterial ramifications above the tumour, should coagulate, as that the blood contained in the space between a ligature placed *above* the tumour and the first anastomosing process below it, should undergo the process of coagulation."

It is true, indeed, that Brasdor, and subsequently Desault, suggested the idea of tying the artery on that side of the tumour most remote from the heart, but this proposal was acted upon only in two cases; first by Deschamps, in a case of aneurism of the femoral artery; and secondly, by Sir Astley Cooper, in a case of aneurism of the iliac artery. Both of these cases having terminated unfavourably, the operation was abandoned, and not only abandoned, but denounced as "absurd in theory, and ruinous in execution," whilst others, who have contributed most largely in modern times to the pathology of aneurism, passed over this proposed operation as unworthy of notice. The merit of reviving it was reserved for Mr. Wardrop; who has, within the last eighteen months, successfully operated on two cases of carotid aneurism, by tying the vessels beyond the tumour.† These cases have been so recently laid before the public, and the merit due to Mr. Wardrop so universally conceded, that it is unnecessary for me to enter into fur-

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ther particulars. I may simply remark, that they were cases which, in pursuance of prevailing opinions, would have been left to inevitable death. Mr. Wardrop has, therefore, the gratification of having saved the lives of two fellow creatures, as well as of having established a principle in the treatment of aneurism, the future benefits of which are almost incalculable. These facts were strongly impressed on my mind, when the following case of aneurism at the root of the carotid artery, afforded me an opportunity of practically ascertaining the merits of tying the artery beyond the aneurismal tumour, a plan of treatment which, it will be seen from the subsequent account, I adopted with success.

A lady, about 49 years of age, of spare habit, and unhealthy appearance, consulted me early in the month of January last, on account of a swelling in the *right* side of the neck. On examining the part, I discovered a pulsatory tumour, situated immediately above the sternal end of the clavicle, being partly covered by the mastoid muscle; it possessed all the characters of an aneurismal swelling, and its pulsations, which were synchronous with the heart's beat, were so forcible, as to be visible even at some distance from the patient. The tumour appeared to be of the size of a large walnut; but on examining it with my fingers, I found that it was considerably larger, extending some way backward, and, as it were, issuing from out of the chest. With the exception of its lower part, the tumour was circumscribed, and its boundaries well-defined; pressure upon it occasioned considerable pain. The account which the patient gave me of the origin and progress of her disease, was as follows:—about two years ago, she received a sudden and violent shock to her feelings from a most painful domestic occurrence, and from that period she found, that on making any bodily exertion, she had tremblings and palpitation of the heart. These symptoms went on gradually increasing, and at the time of her making application to me, had become so much aggravated, that she was incapable of pursuing her ordinary domestic employments. On walking hastily across the room, in the attempt to go up stairs, or under slight mental agitation, her heart became affected with violent palpitation, and the respiration was rendered difficult to a most distressing degree. When she attempted to stoop, she said that she felt a sensation of choking, as if something were pressing on the lower part of the windpipe and interrupting her breathing. The same sensation was also experienced on moving the right arm over the head. She complained of dryness in the throat, with occasional cough, excited by a sense of tickling in the trachea; her sleep was interrupted by frightful dreams; appetite was defective, and she had become much emaciated. There were no marked uneasy sensations in the head, but she complained of dimness of vision in the left eye, and this was much increased at those times when the circulation was hurried. On applying my hand over the præcordial region, I found the heart's impulse to be very great, so forcible, indeed, that it could be distinctly felt at any part of the chest; the pulse at each wrist was vibratory, as was also that of each carotid artery. The pulsations of the right common carotid artery, were apparent nearly throughout its whole extent in the neck. With respect to the formation of the tumour, the patient stated, that she first perceived, some months ago, a beating or throbbing at the lower part of the neck; this symptom became gradually more evident, until at length a small tumour made its appearance, which by degrees attained the size, and presented the characters, I have described.

There could be no doubt that the disease was aneurismal, and apparently affecting the lower part of the right common carotid artery; but whether confined to that vessel, or extending into the arteria innominata, was to me a matter of conjecture, for I am free to confess that I know of no certain dingnostic marks, by which we can discriminate between aneurism at the root of the right carotid artery, and aneurism of the arteria innominata, presenting, as it usually does, a tumour at the lower part of the neck. This, however, is not of the moment which at first sight it appears to be; for, as I shall have occasion presently to remark, the operation of tying the artery above the tumour, is expedient in either case. It occurred to me, therefore, that the only chance which could be afforded to the patient was, that of applying a ligature to the artery above the tumour. The aneurism had been, according to her account, of some months standing; but it had increased more rapidly of late, and the symptoms had proportionally become more distressing, so that a fatal issue was to be anticipated speedily, unless something was done for her relief. Previous to the adoption of any measures, I thought it right to obtain the opinion of Sir Astley Cooper; this I did about a week after I had first seen the patient. Sir Astley Cooper discountenanced the operation, and remarked that "*it was an aneurism by dilatation, which would not increase.*" I must acknowledge that I was not at all satisfied with this opinion, no sufficient reason being shown why the operation should not be undertaken, and I still adhered to my opinion respecting its expediency. Mr. Key, who saw the case at my request, thought that the arteria innominata was affected, and

that the operation was, *therefore*, inadmissible. Similar opinions were entertained by Mr. B. Cooper and Mr. Callaway, who also saw the patient.

In this state of affairs, my own views of the case remaining unaltered, I requested the opinion of my friend Mr. Wakley, who visited the patient, and recommended the operation to be immediately performed, even admitting that the innominata was affected. I also consulted Mr. Wardrop, who, on examining the patient, unreservedly declared himself in favour of the operation; and, as the patient was now becoming uneasy at the delay, (upwards of a month having elapsed since I first saw her,) I fixed an early day for the performance of the operation. The tumour in the neck had visibly increased within the last fortnight, but the patient's general health had undergone some improvement under the exhibition of bitter infusions, with carbonate of soda, and attention to the state of the bowels.

On the first of March I undertook the operation, in the presence of Mr. Wardrop, Mr. B. Cooper, and Mr. Callaway. The steps which I pursued were nearly as follows: the patient being placed on a table with her head elevated, and slightly turned towards the left side, I commenced by making an incision through the skin and cellular membrane, of about three inches in length. The incision was made obliquely—that is, in the direction of the fibres of the mastoid muscle, and at a short distance to the inner side of its tracheal edge. I continued to dissect, layer by layer, gradually and cautiously, until I ascertained by my finger, that I was near upon the trunk of the artery, when I laid aside the scalpel, and used a silver knife. The process of separating and detaching the artery from its adjacent cellular membrane, by means of a blunt instrument, rendered this part of the operation tedious, but at length it was effectually accomplished, and the aneurismal needle (Bremner's) was passed round the artery. The vessel appeared to be unusually large, but, in my opinion, was not unhealthy; one ligature* was tied around it, the ends of which I cut close to the knot; the edges of the wound were brought together by two sutures, and short strips of adhesive plaster.

I experienced no particular difficulty in performing the operation; there was a large superficial vein at the upper part of the incision, but this I took care to avoid, and there was very little blood lost. The edge of the internal jugular vein was seen, but it did not at all overlap the artery, nor was its distension upon expiration apparent, in the least degree; the descendens noni was within the sheath, and in front of the carotid artery; I took care to avoid including this in the ligature, and with respect to the nervus vagus, it was not seen during the operation. The part, at which the artery was secured, was immediately above where it is crossed by the omo-hyoideus muscle.

The patient underwent the operation with great fortitude; she became somewhat faint, however, towards its conclusion, and I allowed her to remain on the table upwards of an hour, before I attempted to remove her to bed. At this time she felt much nausea; and soon after she was placed in bed, vomiting occurred, with violent straining, tending, of course, very much to disturb the parts concerned in the operation. In the evening, as the stomach still continued in an irritable state, I ventured to administer twenty drops of the wine of opium, which had the effect of quieting the stomach.

Before proceeding further in the report of the progress of this case, I may remark that a diminution in the bulk of the aneurismal tumour was immediately apparent on the application of the ligature around the artery, and its pulsation was materially lessened.

On the following day, I found that the patient had passed a comfortable night; the pulse at each wrist was moderate in quantity, but that of the right side was full and strong, as compared with the left. The heart's impulse was very moderate; and the patient, of her own accord, noticed to me that which constitutes an essential feature in her case; namely, that "the beating of the heart was gone." She did not even experience the palpitation after, or at the time she was retching violently, although such an exertion, prior to the operation, would undoubtedly have excited violent action in the heart. The ligature, did not produce any apparent ill-effects on the brain—the cerebral functions not being, in any degree, disturbed.

On the third day after the operation, I moved the dressings from the wound, and also took away the lower suture; the upper part of the wound had united by the adhesive process. The aneurismal tumour had so far subsided, that it was only evident to the eye, by a feeble pulsation at the part; and, on applying the finger, the tumour was felt to be much consolidated, and greatly reduced in size. The patient was, in every respect, doing well; and she remarked, that she now slept better than for two years past, not being disturbed by frightful dreams.

The patient went on well, and I was al-

* The ligature (which I employed at the suggestion of Mr. Wardrop) is known by the name of fisherman's silk; it is, I believe, a vegetable product.

most rid of apprehension; when, upon visiting her on the morning of the tenth day after the operation, I found that there had been some bleeding from the wound, and the blood was observed to be of a red colour. About two or three drachms seemingly had escaped, and the patient remarked that it issued out suddenly, and she felt it trickling down her neck. The upper part of the wound, as I before noticed, had united; the lower part was suppurating freely, the matter discharged being of a healthy character.

As I saw the suppurative process must necessarily be set up in the lower part of the wound, I had during the last few days dressed it with short strips of adhesive plaster, lightly applied, and over these a poultice was put. But on the occurrence of the hæmorrhage I desisted from the use of the poultice, and applied a piece of linen rag, doubled and made wet with cold water, over the adhesive strips. I had the gratification of finding that the bleeding did not recur, and from this period the wound went on progressively healing. The relief which had been given to the patient now became very obvious, and she repeatedly expressed to me in the most grateful terms, her sense of the benefit resulting from the operation. Although I have at present for obvious reasons restricted her from using much exertion, she can now bear moderate exercise without producing any of those distressing symptoms under which she laboured previously to the operation. With respect to the swelling, it has entirely disappeared, and all that can be felt on passing the finger deeply down, is a small hard tumour having a very faint undulatory thrill.

The successful result of this case, I trust will be found to afford an additional confirmation of the merits of this mode of operating for aneurism. The applicability and expediency of tying an artery beyond the tumour in cases where the ordinary method from peculiarity of situation could not be adopted, were amply demonstrated by Mr. Wardrop's two cases. But I am not without hope that this operation may be rendered still more serviceable—that it will be found available in cases hitherto regarded as utterly beyond the reach of surgical aid—I mean aneurisms of the arteria innominata.

If we suppose a case of aneurism of the arteria innominata manifesting itself by a tumour at the lower part of the neck, let us inquire what would be the effect produced by applying a ligature to the right carotid artery in such a case? The impulse of the blood would certainly be diminished, and more especially at the upper part of the sac, the course in which the disease is extending; the obvious effect of an interruption to the ingress of blood in an aneurismal tumour is the formation of a coagulum, and such I apprehend would be the case in the disease under consideration. The diminution of the quantity of blood entering the tumour, and the reduced impetus of the fluid would, I believe, allow of a deposition of coagulum in the upper part of the sac, and thus we should (if I may be allowed the expression) build up the sac at that part where the disease was extending, and prevent its proving fatal from rupture. That the curative process in an aneurismal tumour will go on notwithstanding that the circulation of the blood is kept up to a certain extent, is an acknowledged fact. A case strikingly illustrative of this important point in the pathology of aneurism, is mentioned by Mr. Hodgson in his excellent work on Diseases of Arteries. It was a case of aneurism in which the femoral artery was found dilated into a sac, which was lined on all sides with very firm layers of coagulum, and in the centre was a small irregular canal, through which the circulation was carried on. Now if such curative process as this was permitted in the femoral artery, while the circulation was maintained, it surely will be admitted that the coagulative process might occur in the upper part of the arteria innominata, and at the same time the circulation through the subclavian be carried on.

I am sure it would have been difficult for any man to assert from his knowledge, that the patient whose case I have related was not affected with aneurism of the arteria innominata. And knowing that there was so much doubt on the case, I was led to reflect on the propriety of operating, supposing it to be proved that the arteria innominata was affected, and I came to the conclusion that the operation was admissible in such a case, for the reasons I have mentioned above.

There is a curious fact in the history of the patient's symptoms subsequent to the operation. I mean, the cessation of the heart's inordinate action. It will be remembered, that violent palpitation of the heart, on making the slightest exertion, formed the most prominent and distressing feature in her complaint; this symptom entirely disappeared after the operation.*

Since I have performed the above operation, a second case has fallen under my notice, in which I have also recommended the adoption of a similar course.

* Dr. Parry in his Elements of Pathology, remarks that an increased quantity of blood in the heart will often occasion its action to be diminished, and that when the pulsation of the carotid arteries is full and strong, if strong pressure be made on one or both arteries, the action of the heart will be diminished in force and frequency.

HOSPITAL OF WONDERS.

The following article is taken from the last Number of the YELLOW FUNGUS! Can such things be!! Comments in our next.

"TUMOUR IN THE SPERMATIC CHORD.

"*Account of a Case, in which a Tumour in the Spermatic Chord was complicated with Symptoms so strongly resembling those of Incarcerated Bubonocele, as to lead to an Operation, by which the true Nature of the Disease was ascertained.* Treated at St. George's Hospital, by HENRY JEFFREYS, Esq.

"CASES have not unfrequently occurred where another disease has been mistaken for strangulated hernia, and an operation performed for the relief of the symptoms. The most common of these has been where an enlarged absorbent gland has existed in the usual situation of rupture,—or where there has been an encysted hydrocele in the upper part of the spermatic chord,—or where the testicle has been stopped at the ring of the external oblique muscle, in its descent into the scrotum. But I do not, at this moment, recollect an instance on record exactly similar to that which forms the subject of the following history.

"Philip Haplin, forty-one years of age, was admitted into St. George's Hospital, in the evening of Wednesday, December 27th, 1826, with a tumour in the left groin, accompanied by symptoms resembling those of strangulated hernia.

"He said he was a watchman, and that, on his return home on Saturday morning, December 23d, he was suddenly seized with violent pain in the belly, followed by continued nausea, having had no stool for two days before. The pain was referred principally to the navel, and the lower part of the abdomen. By the direction of a medical gentleman in the neighbourhood, who visited him, he took some pills and aperient medicine, but without any effect. On Sunday he was bled in the arm, and took more purging medicine. On Monday he was still no better, and the bleeding and purgatives were repeated. On Tuesday he observed a swelling in the left groin, and was immediately impressed with the idea that he was ruptured. In the evening of that day he had four or five watery, purging stools, but they were not followed by any material remission of the symptoms. The next morning (Wednesday) he showed the swelling in the groin to the gentleman in attendance, who confirmed his opinion of its being a rupture. The surgeon told him that he had reduced it; and, by his desire, the man walked from his residence in Chelsea to the Strand, for a truss. On his return home, he was unable to bear the pressure of the instrument: the pain and distress in the belly, together with the sickness and vomiting, became much increased; and the swelling was larger and more painful; on which account the surgeon advised that he should be immediately conveyed to the hospital. On his arrival there, the taxis was again tried, but without success. He was then put into the hot bath, and, while there, thirty-two ounces of blood were taken from his arm, when he became faint, and in that condition the house surgeon again attempted the reduction of the swelling, but with no better success than before; and I was therefore sent for.

"It was between nine and ten o'clock when I got to the hospital. Upon examination, I found a tumour in the left groin, about the size of a large walnut, protruding from within the ring of the external oblique, which looked and felt, in all its apparent characters, like a strangulated bubonocele. It was firm, tense, and very painful and tender when pressed. Its anterior or projecting surface was perfectly distinct and circumscribed, and its base fixed and immoveable. The spermatic chord, from the tumour to the testicle, was free and natural. The slightest pressure excited great pain in the tumour, and increased the distress and sickness in the belly, which was swollen and distended. The man had vomited several times since his admission; appeared to be in great agony; and had a very distressed, anxious countenance. He declared positively that he had never had a swelling in that part before, and that it had become larger, and infinitely more painful, since his walk that morning to the Strand and back. I endeavoured for some time to reduce the swelling by gentle and continued pressure, but to no purpose: and therefore proceeded to the operation, as the only remaining alternative.

"Upon cutting through the sheath of the chord, and dividing the fibres of the cremaster muscle, there turned out a loose elastic substance, which appeared to consist entirely of cellular membrane, and was as large as a pigeon's egg. Under the upper part of this mass, coming out from the ring, a firm white tumour, of the size of a large Spanish olive, was exposed, which was imbedded in and closely attached to the substance of the chord. It had no resemblance to a recent hernial sac, nor to the pellucid membrane of an encysted hydrocele, but was tough and thick. When cut into, about a drachm and a half of clear water escaped; and it was then perceived to consist of a cyst, the parietes of which were nearly as

thick as a half-crown. Its internal surface was smooth, and formed into little sacs or pouches; and it passed up nearly half an inch within the ring, but it had no communication whatever with the abdomen. As it could not be dissected out without slitting up the ring, and at the risk of injuring some of the vessels of the chord, I laid it freely open, and, having first satisfied myself that nothing like hernia existed in any part of the inguinal canal, put some lint lightly into its cavity, and brought the upper and lower parts of the wound gently together with sutures and sticking plaster. The man was then put to bed; and, as he complained of great pain in the wound and in the belly, he had forty drops of laudanum; and was afterwards directed to take two drachms of Epsom salts, dissolved in peppermint water, every three or four hours, till stools should be obtained.

"He vomited only twice after the operation: the pain in the belly then began to remit; and, in the course of the morning of the 28th, he voided four or five large purging stools, full of scybala; and could bear pressure on the abdomen without flinching. A considerable degree of swelling had already come upon the chord, which extended up within the ring and down to the testicle, and filled up all that side of the scrotum. The integuments over it were red and inflamed, and it was tender and painful when touched. His pulse was full and strong, beating 108 in the minute; and his tongue was white and furred.

"Blood was taken away from his arm; and he was ordered to take a saline draught every four hours, containing half a drachm of vinum antimonii tartarizati, and as much sulphate of magnesia.

"December 29. He had passed plenty of purging stools, and the pain in the belly and sickness had entirely subsided. But he complained of a good deal of pain and tenderness in the chord and scrotum, the swelling of which was increased to the thickness of a man's wrist, and was tense and hard. He complained also of a troublesome cough, with an abundant expectoration of mucopuriform matter, which, he said, he had been affected with for some weeks. Tongue rather dry; pulse 108.

"The sutures were cut away from the wound. Twenty leeches were directed to be applied to the swelling, and afterwards a large bread-and-water poultice, and a suspensory bandage; and the draughts to be continued.

"The next day, December 30th, ten more leeches were applied. On the 31st, a healthy suppuration was established, and the lint came away from the cavity of the cyst. The swelling, pain, and tension of the chord and scrotum were much reduced; he had a clean tongue, open bowels, and his pulse was reduced to eighty-eight in a minute.

"From this time nothing occurred to retard his recovery: the swelling rapidly diminished; the discharge was moderate and good; the wound filled up with healthy granulations; and, on the 30th of January, it was entirely healed, a very slight degree of thickening only remaining where the cyst had existed.

"The close resemblance which the tumour in this case bore, in all its apparent characters, to strangulated bubonocele,—the duration and increasing severity of the symptoms,—and the total failure of the remedies already tried, left no other resource but the operation to propose: indeed, to have delayed it under such pressing circumstances would have been inexcusable. No part, however, of the relief obtained can be attributed to the operation. The complaint in the bowels was clearly obstruction and inflammation, brought on by previous constipation; which were subdued by the copious bleeding, warm bath, and other means made use of after the patient's admission into the hospital. The tumour in the groin had probably existed for some time. The man discovered it by accident; and, combining it with his other symptoms, naturally conceived that he was ruptured. The rude and ineffectual attempts to push it up into the belly, excited pain and swelling of the part, and thus rendered its resemblance to hernia more remarkable. Had the true nature of the swelling been ascertained, a better mode of treating it could not, perhaps, have been proposed than that which was adopted and proved successful,—viz. the laying it fairly open by a simple incision. The case, being one of rare occurrence, is altogether highly interesting, and its result very satisfactory.

"5, Arlington Street, Feb. 1, 1827."

To the Editor of THE LANCET.

SIR,—The advantage of prompt and wide circulation, induces me to trouble you with the inclosed case for insertion in THE LANCET. I remain your obedient servant,

E. BARLOW, M.D.

Bath, Sydney Place, March 17, 1827.

A Case in which Chalybeate Pills were retained for an unusual time in the Intestines. By E. BARLOW, M.D., *one of the Physicians of the Bath Hospital or Infirmary, and of the Bath United Hospital*, &c. &c.

THE following case seems to merit publicity; it records an extraordinary retention of

chalybeate pills in the intestines, and suggests a salutary caution in the employment of such remedies, especially to those females who empirically resort to them:—

F. G., a delicate girl, 17 years old, who had never menstruated, was seized with acute pains of head, and the general fever, the health having for some time previously been in a declining state. Three children, in this family, had fallen victims to hydrocephalus, a fact which rendered the assemblage of symptoms, in this case, sufficiently formidable. A hot skin, parched tongue, flushed face, with eyes bright and sparkling, added to the severe pain of the head, and inordinate action of the heart, denoted active disease within the brain. The attack yielded to prompt and decisive treatment, the particulars of which I need not detail, the object of this paper being to record an unexpected occurrence which took place in the course of it.

Under the early purging it was notified to me, that the pills administered were passing unchanged. Satisfied that they were little likely to remain undissolved, I directed the pills discharged with the stools to be saved, and, on inspecting them, I readily perceived that they were none of those which I had prescribed.

I now learned, for the first time, that twelve months before, this girl had been persuaded by a lady to employ Hooper's pills as a remedy for amenorrhœa, and that she had, at different times, taken three boxes of forty pills each. The mother and daughter were not agreed as to the precise time when the last were taken, but both concurred in stating, that none had been used within the preceding six months.

From this time the pills passed were collected, and above fifty were thus obtained. The identity of the pill was established by chemical analysis; Mr. Cuff, a very intelligent chemist of this city, having demonstrated the chalybeate impregnation. For the most part they were passed separately; a few masses, however, were discharged, in which from six to eight were conglomerated. At first they were swollen to about twice the origininal size, but evaporation of the fluids absorbed, soon reduced them, so that when compared with pills taken from a fresh box, even the outward appearance perfectly corresponded.

The long retention of these pills was itself sufficiently extraordinary; but the degree of mischief occasioned by such a quantity of iron being so long lodged in the bowels, demands more serious scrutiny. It appears to me to have injured in two ways—by disordering the bowels, and by producing excitement in the heart and arteries, with determination of blood to the brain.

The bowels were in a highly morbid condition, the stools being foul to a degree, greatly exceeding that of ordinary febrile motions, and continuing so in despite of active and steady purging.

The abdomen was concave, so as to give the impression of the parietes being nearly in contact with the spine; it was tense, its skin harsh and dry, and a diffused tenderness pervaded the whole.

The irritability of pulse, too, was unusually slow in yielding; for though bloodletting, purging, calomel, antimony, and digitalis, made due impression on the more formidable symptoms, the action of the heart continued inordinate, and palpitation, with throbbing pulsation in the head, prolonged distress, and very slowly abated. It is almost superfluous to add, that the general emaciation was considerable.

Hooper's pills, I believe, consist chiefly of iron and myrrh. Prepared in large quantities, and remaining an indefinite time in the shops, they acquire great hardness, and possessing naturally but little solubility, it is not surprising that they should pass through the bowels unchanged. The retention of such a quantity, for more than six months, is less easily comprehended, and only to be understood on the supposition of their having lodged in the cæcum, or in the expansions of the colon, found between its annular bands.

Being thus insoluble, it may be conceived that they were harmless, further than as a foreign body exciting mechanical irritation. This supposition, however, can hardly be maintained, when it is recollected that though undissolved, so far as regards their obvious bulk, they were permeated by fluids to the extent of doubling their size, and that a means thus existed for the saline ingredients escaping, and mixing with the intestinal fluids.

I can conceive nothing more likely to excite the heart and arteries inordinately, and dispose the body not only to general inflammatory action, but more especially to acute disease within the head, than such a medicinal agency continuing uninterrupted for so long a period.

The facts here recorded are valuable, from the caution which they suggest, not only to those who resort to patent drugs, but to regular practitioners,—who, in administering pills with iron, should be careful to ensure their ready solution by appropriate combination, and also by having them always freshly prepared.

LONDON MEDICAL SOCIETY.

Mr. Amesbury introduced to the notice of the Society a portion of a thigh bone, which it was believed had been fractured within the capsule. The bone was sent to town by Mr. Chorley, of Leeds, who had the management of the case. Mr. A. was not minutely acquainted with the history of the case, but he was given to understand, that the gentleman from whom the bone was taken, slipped off a step as he was going from his own door, and the weight of his body falling suddenly upon the limb, occasioned the fracture. Immediately after the accident, the usual symptoms of fracture of the neck of the thigh bone, were observed; the foot was everted, and the limb shortened about an inch. Mr. Chorley employed such means as occurred to him, without following in particular any of the modes of treatment commonly recommended. His plan of treatment, however, was such as he conceived most likely to keep the limb extended, and the fractured surfaces in apposition. The gentleman was confined to bed six months, and was 79 years of age when the accident occurred. Mr. A. observed, that the fracture had taken place very near the head of the bone, and therefore there could be no doubt that it was within the capsule. There was a part of the neck of the bone below the fracture, which extended through the bone, just below the head, the appearance of which led him to doubt whether there had been a second fracture extending along the neck of the bone, in such a manner as to separate a portion of the shell of the bone from the cancellous structure immediately beneath it; or whether the appearance which the bone exhibits in this part, was the result of ossific deposit, which took place subsequent to the accident. Mr. A. thought this point could not be clearly decided, without dividing with the saw that portion of the head and neck of the bone, which led him to question whether this irregularly united bony matter observed upon the external surface of the neck be or be not a part of the original bone. The head and neck of the bone had been divided, and Mr. A. submitted the two portions to the inspection of the Fellows; and begged that they would favour him with their opinions respecting the present appearances of the bone, as far as they relate to the fracture.

Mr. Langstaff observed, that he had no doubt whatever that this bone had been fractured within the capsule, and that it was now united by the interposition of bone.

Mr. Callaway stated, that Sir A. Cooper does not assert that union by bone could not take place when the fracture was within the capsule; he says, on the contrary, that if the close coverings be not torn through, union by bone might possibly be effected.

Mr. Lloyd observed, that though Sir A. Cooper admits in his work on dislocations, that union by bone might possibly be brought about when the close coverings are not torn through, there is strong evidence to show that this is not Sir A. Cooper's opinion. Though he admits such a fracture may unite, the observations which he makes in other parts of his work, are of such a nature as to lead us to infer that he does not believe that union by bone can be effected even in such cases.

Mr. Kingdon thought, that the neck of the bone might have been crushed without a complete division of the coverings which closely surround it.

Mr. Amesbury was at a loss to know how Mr. Kingdon could have arrived at such a conclusion, for upon inspecting the cut surfaces, he might perceive, that the fractured end overlapped as much as three fourths of an inch, which he presumed could not have taken place, unless the close coverings had been completely divided, and in this opinion he was borne out by the retraction which took place immediately after the accident. There did not appear to Mr. Amesbury any thing in the appearance of the preparation which would authorise us to say, that the neck of the bone was crushed by the force which occasioned the fracture.

Mr. Langstaff said, that he had several preparations in his possession, showing bony union of fracture of the neck within the ligament, and that he should bring them with him on Monday next.

Dr. Roberts showed a tape-worm, measuring eight feet in length, which had been expelled by the administration of one ounce of the oil of turpentine in one dose, after various other remedies had been used without effect.

HYDROPHOBIA.

To the Editor of The Lancet.

Sir,—The case of the late unfortunate Ann Hudson, published in the *Morning Herald* of the 6th instant, with that of the equally unfortunate Mr. Powel, as detailed in *The Times* of yesterday, furnish, within one week, two melancholy proofs, in addition to those already on record, of the total inefficiency of every variety of medical treatment recommended by the faculty of the present day, in this truly unconquerable disease.

It may indeed be questioned, whether the free and always *despairing* administration of such powerful poisons as Prussic acid, belladonna, nux vomica, acetates of lead and of morphine, do not hasten its fatal issue, and, however revolting the thought, thus become the only boon which the science of physic, in its present state, can offer to the devoted victim. As all those around the sufferer know that the disease leads rapidly to death, if the medicinal poison cannot effect some change in its course, they say, let the drug be given until some alteration in the symptoms is produced. But, unfortunately, they do not recollect, or perhaps do not know, that the symptoms arising from the absorption of all and every one of the active poisons hitherto experimented upon, are precisely those that characterise the disease resulting from the bite of a rabid dog.—Prussic acid, strychnia, upas tieuté, upas anthiar, the poisoned arrows of Java and of Africa, the extract of nux vomica, the essential oil of tobacco, the venom of the viper, when applied to a wounded surface, all procure tetanic spasms, stricture of the muscles of deglutition, irregular respiration, convulsions, and death. The poison of the rabid dog, when it enters the circulation, gives rise to the same train of symptoms.

I would ask, then, upon what process of reasoning is the expectation founded, that the exhibition of any of these poisons can alleviate the symptoms, or avert the death which they all produce with equal and unerring certainty? How can the phenomena, arising from the mixture of one or more of these poisons with the blood, be distinguished from those of the others, seeing that the characteristic effect produced by all and every one of them upon the animal, is irregular contraction, as well of the muscles of voluntary as of involuntary motion? A disease then, of which irregular muscular action is the leading peculiarity, cannot be relieved by poisons capable "*per se*," not only of aggravating, but of producing this characteristic and deadly symptom; in fact, as the effects of the medicinal and rabid poisons cannot be distinguished *accurately* from each other, no rational bounds can be assigned to the administration of the former, nor any very certain criterion established as to the share which the latter may have had in the destruction of the individual. The melancholy experience of some centuries has placed these facts beyond the pale of doubt; yet we find these poisons every day prescribed in hydrophobia, and strange enough to say, to the exclusion of modes of treatment which have authority, experiment, and analogy to recommend them.

In this disease, Galen and Celsus employed, and not without success, the cupping-glass, the vapour-bath, and sudden immersion in cold water; yet none of these remedies are resorted to in the present day.

Modern and well-authenticated experiments have proved, that when a poison, whether mineral, vegetable, or animal, is applied to a wound, the animal is not affected until absorption has taken place; for if an exhausted cupping-glass be placed over the poisoned part, but one minute before the expiration of the time at which the poison is known invariably to produce its effects, the animal exhibits no symptoms whatever. Now it is a law, that absorption cannot take place *in vacuo*; therefore the mixture of the poison with the circulating fluids is affected during the last minute of its application, that is, at the instant that the convulsions begin.

"The notion that the hydrophobic poison is taken up and mixed with the blood after the manner of other substances similarly circumstanced, but that it does not produce its peculiar effects until after it has wandered through the penetralia of the animal during forty days or longer, is in direct opposition to all analogy." * Every thing, on the contrary, leads to the belief that the virus, which is afterwards to contaminate the circulation, is generated in the wounded part from the germ first deposited there by the tooth of the dog, just as we see take place in variola, vaccine pock, and lues. The period of assimilation of the fluids of the innoculated part is different in all these. But as soon as absorption of this assimilated matter commences, the symptoms of the disease begin to show themselves.

Under the presumptive impression then, that in hydrophobia, as well as in all other varieties of poisoning, the transport of the deleterious matter from the wound into the system, and the appearance of the symptoms peculiar to the poison, follow each other as cause and effect—*as soon as hydrophobic symptoms come on*, when the cicatrix begins to feel at all tender, or as soon as there is sufficient evidence that the animal that inflicted the bite was rabid, we should—1st. Immediately apply the cupping-glass, and keep it over the part for an hour. 2dly. Without having made any previous incision, we should dissect out the bitten part. 3dly. We should re-apply the cupping-glass for another hour, to wash out the vessels by a retrograde stream. 4thly. We should seal up the open mouths of the vessels by the free application of a heated iron.

During this treatment castor oil, with peppermint water, or some other carminative, should be freely administered, and

* Experimental Researches by Dr. Barry, page 151.

assafœtida lavements to relieve the gaseous distension of the bowels, which is always a prominent symptom in hydrophobia. The vapour-bath, and unexpected immersion in deep water, might be resorted to if necessary; but above all, the cupping glass should be trusted to, if it be found to suspend the spasms, as it invariably does in every other variety of traumatic poisoning.

It is almost unnecessary to add, that the tetanic drugs already enumerated, and all others of that class, should be most sedulously avoided.

If these poisons be employed internally, at the same time with the measures here recommended, the patient may perish from their effects, whilst by those about him he is thought to have died of canine hydrophobia. Besides, no precise information can be obtained by this double treatment, whether the case terminate favourably or otherwise.

I remain, Sir,
Your obedient servant,
MYSOTOXICOS.

London, 9th March, 1827.

To the Editor of THE LANCET.

"Omne tulit punctum qui miscuit utile dulci."
HORACE.

SIR,—I take the liberty of requesting your co-operation in promulgating my new and improved system of teaching the several branches of medical science; and from its obvious importance to the rising generation, I have little doubt of securing your support in its behalf. It is called the Conundro-Catechetical system, and its professed aim is to smooth the avenues to medicine, and to render the acquisition of the art both easy and entertaining. My plan of instruction, Sir, is as follows:—I issue, daily, twelve questions on different branches of medicine and surgery. The pupil who, at the end of the hour, returns his paper to me with the greatest number of correct answers, receives and wears for the rest of the day a medal, having on its obverse face the head of Hippocrates; and on the reverse a Sphinx, couchant at the foot of a pedestal, on which are inscribed the names of Harvey, Sydenham, Boerhaave, Haller, Morgagni, and Baillie. I enclose, Sir, as a specimen of the new system, the exercise of this day, with the answers, as furnished by one of my most advanced pupils.

After considerable labour, I have succeeded in arranging the whole of the Practice of Physic and of the Materia Medica, according to the new system, and I have made considerable progress with anatomy. I should not, however, have made this early announcement of the plan, had I not understood that some teachers in the west end of the town have heard of it, and are attempting to palm it on the world as their own. Whatever merit it may possess (and I shall willingly bow, on this point, to the decision of the public) belongs exclusively to, Sir,

Your most obedient humble servant,
JOSEPH RIDDLE, M.R.C.S.
15, New-street, King-street,
March 12, 1827.

First Series of Questions, with the appropriate Answers, illustrating the New, or Conundro-Catechetical System of teaching Medicine.

NOSOLOGY—1. Why are apoplexy and palsy like a bunch of spring flowers?

Ans. Because they are the first of the *new-roses* (neuroses).

2. Why is a standard taken in battle like marasmus?—*Ans.* Because it is *a-trophy*.

SURGERY—3. Why is adhesion like a hasty marriage?—*Ans.* Because it is union by the first intention.

4. Why is a granulating sore like Brentford?—*Ans.* Because it is near *Ealing*.

PRACTICE OF PHYSIC—5. Why is a patient with tenesmus like a ferryman of Pavia?—*Ans.* Because he is always on the *Po*.

6. Why are bugs like the epidemic of 1665?—*Ans.* Because they are the great plague of London.

ANATOMY—7. Why is a radical distinction like an important excretory duct?—*Ans.* Because it is a *vas deferens* (vast difference).

THERAPEUTICS—8. Why is the extract of belladonna like a good lecture?—*Ans.* Because it enlarges the capacity of the pupil.

MIDWIFERY—9. Why is abortion like an old comedy?—*Ans.* Because it is Love's Labour Lost.

PHARMACY—10. Why is a patient with sciatica in a fair way of promotion?—*Ans.* Because he'll have an order of the *Bath*.

MISCELLANEOUS—11. Why is a pupil of the new school like a man walking to Blackfriar's bridge?—*Ans.* Because he is sure to pass the hall.

N.B. Mr. Joseph Riddle's next course of Instruction begins on the 1st of April, at ten o'clock, a.m. A vacancy for one house pupil.

To the Editor of THE LANCET.

SIR,—THE following anecdote, translated from the "Hermite in Ecosse," may amuse some of your readers, and, should any *petit maitre* of a physician peruse it, and see his character portrayed in all its living absurdity, and be induced for the future to refrain from

the use of affected and pedantic jargon, its insertion will not be without its use, if you give it a place in your very valuable Journal:—

"A maid-servant in a gentleman's family being unwell, her master having some slight acquaintance with a young physician who had very recently attained the degree of *Doctor*, sent for him to attend her. The doctor shortly arrived; a dapper little personage, "neat trimly drest" in bran-black, with a powdered head, and "perfumed like a milliner;" he was shown into a parlour: whilst adjusting his cravat at the looking-glass, the invalid entered, a robust and strapping country lass, an unsophisticated child of Nature, when the following dialogue ensued:—

Doctor. Well, child, what have you to say to me?

Girl. I don't know, Sir—very little.

Doc. What do you complain of?

Girl. I do not complain of any thing, but I am not altogether well.

Doc. We will soon render you convalescent; let me feel your pulse; (placing his fingers on her wrist;) skin hard and dry!

Girl. In consequence of hard work, Sir.

Doc. Have you never had any scorbutic affection?

Girl. No, Sir, I never had any affection, but for poor Jemmy Copland, who went to London.

Doc. What simplicity! (with his fingers still on her wrist, taking out his watch, and marking the seconds.) Ah! full and irregular! What are the symptoms that annoy you?

Girl. What, Sir?

Doc. Have you had any rigors, or trembling fits; have you a sensation of tension in the digestive organs—any tumefaction in the abdominal regions?

Girl. And why should I tremble, Sir? I have never done any thing abominable!

Doc. Poor ignorant creature! You must take some mild aperient, and refrain from all excitement, mental or corporeal.

Girl. (With indignation.) The corporal, Sir! I can assure you the corporal is not the cause of my illness; I am a virtuous girl.

Doc. Have the goodness to show me your tongue. Ah, white and dry! You experience nausea, headache, and a weariness—a prostration of strength?

Girl. (Very angrily.) I wonder, Sir, how you dare to say, that I have lost my strength by prostitution! Who do you take me for, Sir?

Doc. Have you no irregularity at particular times?

Girl. (In a violent passion.) I have told you before, Sir, that my conduct has always been regular.

Doc. Don't be angry, my good girl, your ignorance of technical terms causes an irrascibility which may produce a determination to your head, and occasion a sanguineous or serous apoplexy.

Girl. No doubt the matter is serious enough, Sir, when you take me for a common strumpet; but I'll stay no longer to be insulted by your finical terms.

In the violence of her gesticulation, she burst open the upper part of her dress, and flew out of the room in manifold disorder, slamming the door behind her, just as her master was going to enter, whom she rushed by, muttering revenge against the doctor. What strange ideas might have passed through the mind of the gentleman at that moment, is not for me to divine; he went into the room, and seeing the young physician gazing at the door through which his patient had vanished in breathless astonishment, looking unutterable things, and, ludicrous enough, burst out into an immoderate fit of laughter, which the doctor's offended dignity not being able to brook, he seized his hat, and precipitately fled—*sic transit gloria mundi.*

Yours truly,

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

INFLAMMATION OF THE BURSA MUCOSA,

Situated between the Integuments and Olecranon, succeeded by Phlegmonous Erysipelas of the whole arm, treated by incisions, after Mr. Copland Hutchison's Plan.

Thomas Ranson, æt. 53. This patient, who is a carpenter, and of spare habit, fell and struck his elbow on the pavement, three days before admission; no uneasiness followed until the second day, when swelling and considerable pain came on; this increased on the following day, when he came to the Hospital.

Nov. 29. A light red, and painful inflammatory swelling, distinctly circumscribed, extends from the olecranon, down the outer half of the fore-arm; there is a slight laceration of the integuments over the olecranon extending into the bursa, from which several drops of thin serous synovial fluid are discharged on pressure; general health not disturbed; twelve leeches to be applied; afterwards fomentations and a bread poultice; four grains of calomel, and twelve of jalap, immediately; and a dose of senna mixture four hours afterwards.

30. Inflammation considerably extended on the fore-arm; pulse frequent, yet compressible; venesection ad ʒxvj. from the affected arm; mist. ammon. acet. c. liq. ant. tart. ʒss sextis horis; continue the fomentations and bread poultice.

Dec. 1. The blood taken yesterday considerably cupped, with a thick buffy coat; the inflammation, which has extended to the wrist, and along the upper and back part of the arm to the axilla, has all the character of phlegmonous erysipelas. The patient has passed a restless night, is feverish, and in much pain to-day. Mr. Lawrence pointed it out as a well-marked case of phlegmonous erysipelas, affecting both the skin and cellular membranes, and observed that extensive sloughing of the latter would inevitably ensue, unless the progress of the affection could be checked. He mentioned that the only means of accomplishing this object would be, the treatment recommended by Mr. Copland Hutchison, by free incisions through the inflamed parts, of which he said repeated experience had shown him the greatest advantages. He said this treatment would probably prevent suppuration and sloughing, in the present instance, but that it was equally advantageous after these processes had commenced, in preventing the further progress of the mischief. He therefore made two incisions with the scalpel through the skin and cellular tissue, in the whole length of the inflamed part, from above the elbow, nearly to the wrist. One was twelve, the other ten inches long. The exposed cellular membrane was inflamed and thickened. In one of the cuts it was loaded with effusion of a dusky hue, with small portions of yellow colour. The wounds bled freely, and all redness of the limb disappeared.

2. The bowels have not been opened for the last twenty-four hours; the patient has, consequently, passed a very restless night, and is feverish, with a furred and white tongue; much inflammation, and pain in the limb; the cellular tissue is decidedly sloughing at some points, and a small portion of the integuments adjoining has already done so; a dose of calomel and jalap ordered to be taken immediately, and the senna mixture every two hours, until the bowels have been freely opened.

3. He was freely purged yesterday, and during the night, and is much better to-day. The inflammation is subsiding; to take fifteen grains of Dover's powder at bed-time, if the purging should continue.

4. The bowels yesterday becoming quiet, the Dover's powder was not taken; had a good night; tongue cleaner; the redness of the skin has completely disappeared; the secretions from the wounds being deficient, they were desired to be dressed with yellow basilicon ointment, spread thickly upon lint, and then covered with a linseed poultice.

5. Copious healthy secretion from the wounds; there is general weakness, with slow pulse; to take infusion of bark, with dilute sulphuric acid, three times a-day.

11. Most favourable progress in all respects; there has been partial sloughing of the cellular substance, and skin on the inside of the arm; the wounds are healing rapidly.

16. The wounds nearly cicatrized, and the following day the man left the Hospital.

SYPHILIS COMMUNICATED TO A FŒTUS DURING GESTATION.

Henry Ashton, æt. 5 months, was admitted as an out-patient at this Hospital; its mother states that she has been married nine years, and has had seven children; the four former of whom are living and healthy. Four years ago, and after the birth of these children, she had a primary syphilitic sore, for which she came into the Hospital, and was cured. Since then she has remained free from any symptoms of the complaint, and has had three children. The two first of these three were still-born; this, the youngest, appeared quite well at birth; but, in about three days afterwards, red patches appeared about the umbilicus, and, in another week, about the palpebræ; desquamation of the cuticle, on the hands and feet. For these symptoms the child was brought to this Hospital, where some powders were prescribed for it, under the use of which he got well. Two months ago, copper-coloured blotches broke out upon the scalp, extending to the face and palpebræ; and, in another fortnight, the nostrils began to discharge. Then came excoriation about the anus, and the child was again brought to the Hospital, presenting the following appearances. Superficial copper-coloured blotches about the head and face; thickening redness, and excoriation of the palpebral margins; yellow and viscid discharge from the nostrils, with thickening of the alæ nasi. Excoriation around the anus, with a circular elevated sore on the perineum, about the size of a shilling; the latter is considerably raised, and has a perfectly smooth red surface, without granulations. Took hydrg. c. creta, grs. iv. nocte maneque; in three weeks these eruptions had entirely disappeared; but there being a little return of eruption on the head, it was recommended a powder should be taken once a-day.

PHAGEDENIC ULCERATION OF THE GLANS PENIS, THROAT, AND SKIN.

The following case is an exemplification of the phagedenic form of disease, in which *tonic* and *sedative* means, combined with *generous* diet, proved most available in effecting a cure.

George Tice was admitted under Mr. Lawrence, on the 7th of June last. Five months before his admission he contracted gonorrhœa, which lasted three months. He then observed a sore on the glans near the orifice of the urethra, to which caustic was applied without any benefit; poultices and cold cloths were had recourse to, but the circumference of the sore gradually increased up to the time of his admission.

7. The ulceration, which still possesses the phagedenic character, has destroyed the glans penis, except the mere edge of its corona, of which a very narrow portion remains. The front of this ulcer, which includes the internal surface of the thickened prepuce, forms a deep foul excavation, through which the urine is discharged. Immediately behind this there is a convex prominence of reddish and nearly healthy granulations; apparently the front end of the penis denuded by the destruction of the glans. The circumference of the sore corresponding to the corona glandis, has a foul white surface and ragged edge. The prepuce is swelled, and slightly indurated. There is superficial ulceration of the tonsils, and a foul white ulcer on the right side of the pharynx. On the face and neck there are a few small eruptions, or rather incipient circular ulcerations, of which the larger are about equal in size to a sixpence. The skin is bright red, and the cuticle in the centre, is elevated into a flattened vesicle, by serous or thin purulent secretion. The patient, who is tall and light complexioned, with light hair, emaciated and feeble, with a quick but weak pulse. Mr. Lawrence considered this to be a well marked case of the *phagedenic venereal disease*; its character being shown, not only by the nature and destructive effects of the primary sore, but also by the rapid supervention of the secondary symptoms. As neither mercury nor any other active remedies had been employed, the morbid phenomena had not been interrupted in their progress, and the case was therefore well calculated to exhibit the natural progress of disease. It was determined no mercury should be used internally, but that soothing and strengthening means should be resorted to, in addition to local remedies. Ordered cinnabar fumigation to the penis once a day, bread and water poultice; extract conii. v grains every eight hours; milk diet.

9. Fumigation not yet used; the sore better.

11. Copious hæmorrhage has taken place yesterday and to-day, from the foul and excavated anterior portion of the ulcer, making the patient very weak. Ordered the fumigation, which has been used three times, to be discontinued; bread and water poultice.

13 The bleeding has recurred to a very considerable extent. The sore is decidedly improved, having lost the phagedenic character; a few eruptions have taken place on the head and neck.

16. Severe pain in the left elbow and knee, preventing sleep. The knee is slightly swelled from effusion into the synovial membrane. Ordered six leeches to the elbow.

23 Great general debility. Ordered six ounces of port wine daily.

26 The ulcer of the penis is healed at its back part. The orifice of the urethra and front of the prepuce, are still occupied by a deep and large foul ulceration, over which the urine flows with great pain. The ulceration of the throat has become more extensive, but without symptoms of inflammation or difficulty of swallowing. Some of the eruptions on the face and head have formed circular sores, covered with scales about as large as a shilling. The knee and elbow are very painful. Ordered cinnabar fumigation to the throat and penis; the yellow wash to the ulcers of the head, with bread poultice; the conium and wine to be continued.

This treatment was pursued with little variation to the 29th of July, when the ulcer on the penis had healed. The orifice of the urethra, a portion of which canal had been destroyed, was so much contracted by the cicatrix, that it was necessary to slit it up half an inch, on account of the difficulty in making water; the throat was perfectly well, and the sores on the head soundly cautrized; the knee and elbow were well, but the hands and feet are a little swelled and painful.

August 12. The medicines and wine were discontinued, and the patient left the Hospital with all his syphilitic symptoms completely removed.

This man had had syphilitic disease two years ago: viz. chancre, followed by sore throat, ulcerations of the skin, and pains of the limbs. He took some pills for the chancre, which did not make his mouth sore, nor produce much effect of any kind. When the secondary symptoms appeared, he went into the Norwich Hospital, and there took diet-drink and pills; the latter did not affect his mouth, and he heard the surgeon say, "he should give him no mercury." He has cicatrices on the body, from former ulcerations; one on the thigh is two inches

long by one broad. He remained in the Norwich Hospital about two months, left it cured, and remained well, until he contracted the chancre for which he came into Bartholomew's. From his description, as well as from the cicatrices, it is probable that he had formerly, as on this occasion, the phagedenic form of disease.

OPERATION BY MR. EARLE, WITH A NEW AMERICAN INSTRUMENT.

On Saturday Mr. Earle extracted portions of a lithic acid calculus from the urethra of a boy about fourteen years of age. The foreign body was situated in that portion of the canal, which is opposite the middle of the scrotum. Some degree of interest was excited on this occasion; for, instead of having recourse to the usual operation for extraction, Mr. Earle employed an instrument invented for that purpose by an American, a Mr. Isiah Luke, who was present during the operation. Its construction is simple. It consists of *a straight metallic tube*, (of which there are different sizes, varying from the largest to that of the smallest catheter,) through which passes *a screw*, having, at its extremity, a three *pronged forceps*. The object of the screw is to allow either of the expansion of the forceps to a considerable extent, or of their points, (a little inverted,) being brought nearly into contact. This screw is *tubular*, for the passage of a *probe* or *sound*, which enables the operator to ascertain when the stone is within the grasp of the forceps. A *drill* is likewise fitted to the tube, with which the stone can be broken in fragments, if too large for extraction entire. Mr. Earle, previous to using the instrument, remarked, that it had been successfully employed by Mr. Key, for the extraction of a calculus from the prostatic part of the urethra. That, for himself, he was a perfect novice in its use; but considering, from the construction, it was adequate to the end proposed; and the disadvantages resulting from the ordinary operation, when the calculus was lodged in the situation it was in the present instance; he meant to give it a trial, and the result would prove the extent of its utility.* The instrument was passed down the urethra to the calculus; the forceps was expanded, and the probe passed through the screw to ascertain whether the stone was within their grasp. The points of the forceps were approximated by turning the screw, and the stone being firm within their grasp, its extraction attempted. It gave considerable pain; the boy bellowing lustily. In about five minutes, a fragment was brought away. The instrument was again introduced; the drill passed through the screw; the remainder of the stone broken into fragments, and a second portion extracted with the forceps. The boy was now desired to pass water, and several gritty fragments were voided with the urine, but a large one still remained. The forceps was again tried; but as the piece could not be readily grasped, it was thought unadvisable to attempt the removal longer; the propulsive power of the urine, it was said, would be adequate for its dislodgment. The use of the instrument seemed to occasion considerable pain. Mr. Earle was so satisfied with the *result*, that he has ordered one for the hospital instrument

* We beg leave, respectfully, to differ with Mr. Earle in this matter. Once upon a time, a man was performing an operation, cutting and murdering the King's English, (in common parlance, writing a letter;) another happening to overlook his shoulder and letter likewise, cried out involuntarily, "Good God, Sir, you can't write good grammar;" "Why, who the devil can, with *such an infamous pen*," cried the unfortunate operator.

Mr. Earle had brought into the theatre a man, with the intention of performing the operation of lithotomy. The staff being introduced, Mr. Earle informed those around that he felt the stone. As Mr. Vincent *hesitated*, and Mr. Lawrence doubted, Mr. Earle again took the instrument, but the feel was now somewhat equivocal.* At this juncture, the patient (having turned to some account the observations that had been thrown out) hoped "they wou'dn't cut him for no stone in the bladder." All the *absent* symptoms of the case being taken into consideration, Mr. Earle deferred the operation until next week, provided a stone appears in the interim.

As Mr. Lawrence called so publicly for the names of those cataract-cloth-pulling-off-gentlemen, and as we should be sorry, by any silence of ours, to eclipse their *natural* brightness, we beg thus, as publicly, to inform Mr. Lawrence, that if on Monday next, he put his six dressers all in a *row*, and select from them that man he considers best intitled to be called weak, (Week,) both by nature and name, such person, "in pursuance of his duty to promote the cultivation of sound chirurgical knowledge, and to discountenance practices which have a contrary tendency," can best put him in possession of the name of the offending member of the Royal College, and his associates.

* What will the tolerant serpentine say to this "band of modern sceptics?" Really, St. Bartholomew's seems rapidly verging to perdition, notwithstanding the tutelary power of the sweet "little electrical devil."

ST. THOMAS'S HOSPITAL.

CASE OF TRAUMATIC TETANUS, WHICH PROVED FATAL THIRTY-EIGHT HOURS AFTER THE APPEARANCE OF THE TETANIC SYMPTOMS.

The unusually rapid course with which the following case of tetanus proceeded to a fatal issue, exemplifies the propriety of dividing this disease into the *acute* and chronic form.

Thomas Lee, 43 years of age, a stout muscular man, was admitted into the Hospital on the 24th of February, under the care of Mr. Tyrrell, on account of severe injury to the left hand, and also slight injury to the right hand. The fingers had been crushed with a large stone; the man when admitted was in a state of intoxication, and he was described as being a man of intemperate habits.

It was found on examining the parts, that there was a compound comminuted fracture of the middle finger of the left hand, and a comminuted fracture of the ring and little finger, with contused wounds. On the right hand, the ends of two fingers were found to be much bruised and the nails torn off. There was considerable bleeding from the wounds which, according to Mr. Tyrrell, had the appearance of clean incised wounds, and he therefore considered that as little mischief was done to the surrounding soft parts, it would be proper to make an attempt to save the fingers. He gave directions that the wounds should be dressed with strips of soap-plaster, applied moderately tight, and the fingers to be placed on splints. The patient at the same time was ordered to keep his bed, and to have his hand placed upon a pillow, above his head; a plan of treatment wich Mr. Tyrrell invariably adopts in cases of injury to the hand or arm, on the principle of favouring the return of blood from the part.

In the course of a few days after the accident, the end of the ring and also of the little finger of the left hand, became detached by a process of suppuration; the stumps, however, had a healthy appearance, and union was going on favourably with the middle finger. Poultices were applied to the parts, and they were suppurating freely, the pus being of a healthy character, when, on the morning of the 6th of March, (ten days having elapsed since the receipt of the injury,) the patient complained of stiffness about the jaws and back of the neck, with some difficulty of deglutition. He was visited at noon on the same day by Mr. Tyrrell; the pulse at this time was very irregular as regards its volume, being occasionally large and full, and then in the space of a few seconds becoming faint and small in its beat; the bowels were constipated.

Mr. Tyrrell ordered a dose of colocynth and calomel to be given immediately, two grains of calomel, and one grain of opium to be taken night and morning. Two pints of strong beef tea, and a pint of porter, daily. In the evening, the symptoms had become much aggravated, and on visiting him about nine o'clock, we found the nurse in the act of giving a table spoonful of porter; this excited very great distress, and it was with great difficulty swallowed; the attempt to swallow being attended with strong convulsive action of the muscles about the throat. The pulse was at this time larger in volume than at noon, and the circumstance induced Mr. South, (who visited the patient in the unavoidable absence of Mr. Tyrrell,) to recommend that the porter should for the present be withheld.

March 7. Noon. (Second day of the attack.) This case now presents every symptom of tetanus, in its most aggravated form. The countenance is indicative of extreme anxiety, and is of a livid colour; all the muscles of the body are thrown into violent convulsive action; the spasms occurring either in rapid succession, or at intervals of a few minutes only. The abdominal muscles are rigid, and the body is bent forward, but not in a marked degree; the jaws are prevented from being completely closed, by a small piece of wood which the poor man's wife took the precaution of placing between the teeth; it is, however, of no utility, for the difficulty and distress of swallowing is so great, that the patient is reluctant to make the attempt. The pulse is 130, and small; the skin hot, and the bowels freely open, from the colocynth and calomel exhibited yesterday; the pupils are contracted, and the breathing is laborious. The patient is perfectly sensible, and does not complain of pain. An attempt was made this morning, at eleven o'clock, under the direction of the apothecary, to exhibit fifty minims of laudanum, but a very small portion, however, was swallowed.

Mr. Tyrrell directed twelve ounces of blood to be taken from the back of the neck by means of cupping; a blister to be applied to this part, and also between the shoulders.

[The reason assigned by Mr. Tyrrell, for adopting this plan of treatment, was, that in two cases of tetanus which had fallen under his observation the patients had distinctly referred to the cervical vertebræ, as the seat of pain.]

The poor man derived no benefit from the measures pursued; he continued in the same distressing state until nine o'clock in the evening, when death closed the scene of suffering.

Post Mortem Examination.

This was, as usual, unsatisfactory, throwing no additional light on the pathology of this fatal disorder. In the head, the only morbid appearance perceptible, was slight opacity of the tunica arachnoides, with more than ordinary effusion of serum between this membrane and the pia-mater. There was considerable effusion of serum within the theca vertebralis; and upon the pia mater, at different parts of the spinal cord, were seven or eight patches of ossific matter, each of about the size of a split pea, and of the thickness of a wafer. The lining membrane of the larynx, and also of the pharynx, were more vascular than natural.

Mr. Tyrrell, in making some clinical remarks on the foregoing case, broached the following piece of *pure* surgery: "*the surgeon has little to do with the treatment of idiopathic tetanus.*" When will this nonsense end?

EFFICACY OF CUPPING ON THE LOINS, IN CASES OF INFLAMED TESTICLE.

The almost immediate relief which we have observed to follow *cupping on the loins*, in a vast number of cases of hernia humoralis treated at this Hospital, induces us to notice the practice here. It certainly is one of the most efficacious remedial means in these cases which we possess, and it is a plan of treatment that should be invariably adopted, when there is much pain in the loins.

OPERATIONS.

The operations performed since our last report, are, amputation of the thigh in two cases, by Mr. Travers, on account of disease of the knee-joint. Amputation of the thigh, by Mr. Tyrrell, in consequence of disease affecting the head of the tibia. Lithotomy on a boy, about eleven years of age by Mr. J. H. Green; the gorget employed on this occasion.

GUY'S HOSPITAL.

SECONDARY HÆMORRHAGE, OCCURRING AFTER THE OPERATION FOR POPLITEAL ANEURISM.—FEMORAL ARTERY TIED JUST BELOW POUPART'S LIGAMENT.

In the last Number but one of THE LANCET, it was briefly mentioned that Mr. B. Cooper had operated for popliteal aneurism on the 20th of February. As there was nothing remarkable in the case, or in the operation, it was not considered necessary to enter into the particulars. The case, however, was subsequently rendered interesting by the occurrence of hæmorrhage from the wound in the middle of the thigh, at the part where the artery was secured.

The patient's name was Richard Robins, a stout middle-aged man from the country; he came into the Hospital on the 18th of February, and the operation, as we have previously remarked, was performed on the 20th. The artery was secured at the usual situation, and upon visiting him occasionally afterwards, it appeared to us that he was going on favourably, until five or six days after the operation, when there was some degree of erysipelatous redness about the wound. There appeared to be, however, but little constitutional disturbance, and the inflammatory blush at the edge of the wound subsided under the application of poultices; the suppurative process being now fairly set up.

On the 11th day after the operation, early in the morning, much alarm was excited by the occurrence of hæmorrhage from the wound, evidently of an arterial kind. It was restrained by pressure, but again recurred in the course of the day, and also on the following evening to an alarming extent, and it was therefore deemed advisable to send for Mr. B. Cooper. It was between seven and eight o'clock in the evening when Mr. Cooper came, and having ascertained the particulars of the case, he determined on tying the vessel as near as possible to Poupart's ligament, being unable to secure it above that part, in consequence of the application of pressure to restrain the hæmorrhage. The patient was removed to the theatre, and Mr. Cooper commenced the operation, by making a semilunar incision immediately over Poupart's ligament, when the artery was quickly exposed, and a ligature applied without difficulty. The patient was then removed to bed; there was no further hæmorrhage from the wound, and the man appeared for several days to be going on tolerably well; there was but slight variation in his state from day to day, until Thursday night, March 8th, when he was attacked with vomiting, and symptoms of great depression in the vital powers. The vomiting continued at intervals throughout the night, on the following morning, and also during the whole of that day, Friday. The countenance was anxious, the pulse quick and feeble, and the sickness truly distressing. Little or no relief was obtained from the means employed, which consisted in the application of a sinapism to the pit of the stomach, the exhibition of effervescents, with brandy and ammonia.

The poor fellow died early on Saturday morning, being the eighteenth day from the performance of the first operation, and the seventh day after the second operation. The friends would not allow the body to be examined.